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

Status: 18.04.2024

#### Content:

Semester 1 - 6

#### <u>Semester 7 - 10</u>

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

- Field of study Process Engineering
- Field of study Bioprocess Engineering
- Field of study Chemical Engineering
- Field of study Wood and Fibre Material Technology
- Field of study Food Engineering

<u>Annex</u>

<u>Footnotes</u>

## Curriculum

with the type and scope of the Courses in SWS as well as required performances, the type, scope and Design of which can be found in the module descriptions **Part 1** 

Module	Module name	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	<b>8</b> <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	LP
no.		Semester	Semester	Semester	Semester	Semester	Semester	Semester	Semester (M)	Semester (M)	Semester	
		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	
Mandat	ory area											
<u>MW-</u> <u>VNT-</u> 01 <sup>18, 23</sup>	Fundamentals of Mathematics	4/2/0/1 PL										6
<u>MW-</u> <u>VNT-</u> 02 <sup>18</sup>	Engineering Mechanics	2/2/0/1 PL (5)	2/2/0/1 PL (4)									9
<u>MW-</u> <u>VNT-</u> 03 <sup>21</sup>	Fundamentals of Chemistry - Inorganic Chemistry - Organic Chemistry	2/1/0/0/1 PL (4) 2/1/0/0/1	2/1/0/0/1 PL (4) 2/1/0/0/1									8
<u>MW-</u> <u>VNT-04</u>	Business Administration and Language Skills - Language Competence - Business Administration	2 SWS SK PL (2) 2 SWS SK	2/1/0/0/1 PL (3) 2/1/0/0/1									5
<u>MW-</u> VNT-05	Physics	2/1/0/2/1 2xPL										5
<u>MW-</u> <u>VNT-</u> <u>06</u> 15, 18, 24	Computer Science - Computer Application in Mechanical Engineering - Software and Programming Technology	2/2/0/0 PL (4) 2/2/0/0/0	2/1/0/1/0 2xPL (4) 2/1/0/1/0									8
<u>MW-</u> <u>VNT-07</u> <u>12, 15, 18,</u> <u>24</u>	Design Theory	2/2/0/0/1 (4)	2/2/0/1 PL (4)									8

Module	Module name	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	<b>6</b> <sup>th</sup>	<b>7</b> <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	LP
no.		Semester	Semester	Semester	Semester	Semester	Semester	Semester	Semester (M)	Semester (M)	Semester	
		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	1
MW-	Fundamentals of Material		2/0/0/1/1	2/0/0/1/1								6
<u>VNT-08</u> 1, 23, 32	Science		(3)	2xPL								
				(3)								+
<u>MW-</u> VNT-09	Engineering Mathematics		4/2/0/1 PL									6
<u>1, 10, 11,</u>												
<u>12, 23</u>												
MW-	Fundamentals of			2/2/0/1 PL								5
<u>VNT-10</u>	Kinematics and Kinetics											
<u>MW-</u>	Fundamentals of Electrical			2/2/0/2/1								7
<u>VNT-</u>	Engineering			2xPL								
<u>11 <sup>15</sup></u>												<u> </u>
<u>MW-</u>	Engineering			2/2/0/1 PL	2/2/0/1 PL							9
<u>VNT-12</u> 1, 6, 12, 32	Thermodynamics/Heat Transfer			(5)	(4)							
	- Technical											
	Thermodynamics			2/2/0/0/1								
	- Heat Transfer				2/2/0/0/1							
MW-	Special Topics of			2/2/0/0/1	2/2/0/1 PL							9
<u>VNT-13</u>	Mathematics			(4)	(5)							
<u>1, 10, 23</u>												<u> </u>
<u>MW-</u>	Physical Chemistry and			2/1/0/0/1	2/0/0/1 PL							6
<u>VNT-</u> 14 <sup>21</sup>	Biochemistry			PL (3)	(3)							
14	- Physical Chemistry			(3) 2/1/0/0/1								
	- Biochemistry			2/1/0/0/1	2/0/0/0/1							
MW-	Processing Machines and				5/2/0/0/1							8
VNT-15	Apparatus Technology				2xPL							
	- Apparatus Technology				2/1/0/0/0							
	<ul> <li>Processing Machines</li> </ul>				2/1/0/0/1							
	- Production and Logistics				1/0/0/0/0							<u> </u>
<u>MW-</u>	Introduction to Process			4/2/0/0 PL	4/0/0/1 PL							10
<u>VNT-16</u> 6	Engineering and Natural			(5)	(5)							
_	Materials Technology											

Module name	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	LP
	Semester	Semester	Semester	Semester	Semester	Semester	Semester	Semester (M)	Semester (M)	Semester	
	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	
Fundamentals of Fluid Mechanics				2/2/0/1 PL							5
General and Engineering- Specific Qualifications in Process Engineering and Natural Materials Technology					#/#/# PL 1) (2)	#/#/# PL 1) (3)					5
Measurement and Automation Engineering					2/1/0/1/0 PL (4)	2/1/0/1/0 2xPL (4)					8
Subject-Related Internship							15 weeks profession al Internship Project Work 270 h (processing time 26 weeks) with presentatio n				30
	Fundamentals of Fluid Mechanics General and Engineering- Specific Qualifications in Process Engineering and Natural Materials Technology Measurement and Automation Engineering	Semester         V/Ü/S/P/T         Fundamentals of Fluid         Mechanics         General and Engineering- Specific Qualifications in Process Engineering and Natural Materials Technology         Measurement and Automation Engineering	SemesterSemesterV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: Comparison of the second seco	SemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterGeneral and Engineering- Specific Qualifications in Process Engineering and Natural Materials TechnologyImage: SemesterImage: SemesterMeasurement and Automation EngineeringImage: SemesterImage: SemesterImage: Semester	SemesterSemesterSemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterGeneral and Engineering- Specific Qualifications in Process Engineering and Natural Materials TechnologyImage: SemesterImage: SemesterMeasurement and Automation EngineeringImage: SemesterImage: SemesterImage: SemesterMeasurement and Automation EngineeringImage: SemesterImage: SemesterImage: Semester	SemesterSemesterSemesterSemesterSemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterImage: SemesterGeneral and Engineering- Specific Qualifications in Process Engineering and Natural Materials TechnologyImage: SemesterImage: SemesterImage: SemesterImage: SemesterMeasurement and Automation EngineeringImage: SemesterImage: Semester SemesterImage: SemesterImage: SemesterImage: SemesterImage: SemesterImage: Semester <t< td=""><td>SemesterSemesterSemesterSemesterSemesterSemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TGeneral and Engineering- Specific Qualifications in Process Engineering and Natural Materials TechnologyImage: SemesterImage: Semeste</td><td>SemesterSemesterSemesterSemesterSemesterSemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterImage: SemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: Semester<t< td=""><td>SemesterSemeste</td><td>SemesterSemeste</td><td>SemesterSemeste</td></t<></td></t<>	SemesterSemesterSemesterSemesterSemesterSemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TGeneral and Engineering- Specific Qualifications in Process Engineering and Natural Materials TechnologyImage: SemesterImage: Semeste	SemesterSemesterSemesterSemesterSemesterSemesterSemesterSemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: SemesterImage: SemesterImage: SemesterV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TV/Ü/S/P/TFundamentals of Fluid MechanicsImage: SemesterImage: Semester <t< td=""><td>SemesterSemeste</td><td>SemesterSemeste</td><td>SemesterSemeste</td></t<>	SemesterSemeste	SemesterSemeste	SemesterSemeste

Module	Module name	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	LP
no.		Semester	Semester	Semester	Semester	Semester	Semester	Semester	Semester (M)	Semester (M)	Semester	
		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- VNT-21	Research Internship								0/0/0/0/0 1 SWS Project (10)	0/0/0/0/0 1 SWS Project, E (2 days) Project Work 530 h (processing time 26 weeks) with presentatio		20
<u>MW-</u> VNT-22	Interdisciplinary Technical Qualification of Process								#/#/#/# PL 2)	2xPL (10) #/#/#/# PL <sup>2)</sup>		10
	Engineering and Natural Materials Technology								(5)	(5)		
	ory elective area	[										
	ory and elective modules of en field of study according to					#/#/#/# PL (22 or 25) <sup>*</sup>	#/#/#/# PL (22 or 25) <sup>*</sup>		#/#/#/# PL (13 or 15) <sup>*</sup>	#/#/#/# PL (13 or 15 <sup>)*</sup>		77
Diploma	thesis										27	27
Colloqui	um										3	3
Credit p	points	30	28	32	30	28 to 31*	29 or 32*	30	28 or 30*	30 or 32*	30	300

### Part 2 - Elective

# Assignment of compulsory and elective modules of the fields of study Field of study Process Engineering <sup>3)</sup>

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
Compulsory m	odules					
MW-VNT-23 <sup>1</sup>	Fundamentals of Mechanical and	4/2/0/0 PL				7
	Thermal Process Engineering					
	- Basic Processes of Mechanical Process					
	Engineering	2/1/0/0/0				
	- Basic Processes of Thermal Process					
	Engineering	2/1/0/0/0				
MW-VNT-24 6,	Fundamentals of Chemical Process	2/2/0/1/0 2xPL				5
28	Engineering					
	- Fundamentals of Reaction Engineering	2/2/0/0/0				
	- Process Engineering Internship	0/0/0/1/0				
MW-VNT-25 1,	Plant Engineering and Safety Engineering	4/0/0/0 PL				5
<u>6, 28, 35</u>	- Plant Engineering	2/0/0/0/0				
	- Security Technology	2/0/0/0/0				
MW-VNT-26	Heat Transfer and Mass Transfer	2/2/0/0 PL				5
	- Heat Transfer and Mass Transfer	2/2/0/0/0				
MW-VNT-27	Fluid Mechanics for Mechanical Process		2/2/0/0 PL			5
	Engineering					
	- Flow Problems in Mechanical Process		2/2/0/0/0			
	Engineering					
MW-VNT-28	Consolidation and Application of		4/1/0/0 PL			5
	Thermal Process Engineering					
	- Thermal Process Engineering		2/1/0/0/0			
	- Environmental Technology		2/0/0/0/0			
<u>MW-VNT-29</u>	System Process Engineering		2/2/0/0 PL			5
<u>6, 16, 23</u>	- Process Analysis and Design of					
	Experiments		1/1/0/0/0			
	- Systems Process Engineering		1/1/0/0/0			
MW-VNT-30 <sup>6,</sup>	Multiphase Reactions		2/1/0/1/0 2xPL			5
<u>28</u>	- Multiphase Reactions		2/1/0/0/0			
	- Process Engineering Internship		0/0/0/1/0			

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> 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-VNT-31</u>	Chemical Thermodynamics and		2/2/0/0 PL			5
<u>6, 16</u>	Multiphase Thermodynamics					
	- Chemical Thermodynamics and					
	Multiphase Thermodynamics		2/2/0/0/0			
Elective modu	les					
Modules amou	nting to a total of 30 credit points must be se	elected from the area	as of Basic Research	and Specialisation, o	f which modules amo	ounting to
at least 10 cred	it points must be selected from the area of B	asic Research.				-
Area of Basic F	Research					
<u>MW-VNT-32 <sup>2</sup></u>	Particle Technology			3/2/0/0 PL		5
	- Selected Mechanical Processes			1/1/0/0/0		
	- Particle Measurement Technology			2/1/0/0/0		
<u>MW-VNT-33 <sup>8</sup></u>	Process Automatization			3/1/0/1/0 2x PL		5
	- Process Control Engineering 1			2/0/0/1/0		
	- Process Control Engineering 2			1/1/0/0/0		
MW-VNT-34 <sup>5</sup>	Reactor Technology			3/2/0/0 2xPL		<del>5</del>
	Reaction Control			2/1/0/0/0		
	- Reactor Simulation			<del>1/1/0/0/0</del>		
MW-VNT-35	Energy Process Engineering				2/1/0/0 2xPL	5
<u>15, 29</u>	- Energetic Process Integration				0/1/0/0/0	
	- Thermo-economic Modelling				2/0/0/0/0	
MW-VNT-121	Reaction Control and Reactor Technology			3/2/0/0 2xPL		5
5, 15, 16, 17, 29, 35	- Reaction Control			2/1/0/0/0		
	- Reactor Simulation			1/1/0/0/0		
Area of Specia	lisation					
MW-VNT-36 <sup>5</sup>	Recycling			4/1/0/0 2xPL		5
	- Production-Integrated Environmental					
	Protection			<del>2/1/0/0/0</del>		
	- Solid-fluid Mass Transfer Processes			2/0/0/0/0		
<u>MW-VNT-37 <sup>2</sup></u>	Interfacial Technology			4/1/0/0 PL		5
	- Interfacial Phenomena			2/0/0/0/0		
	- Product Development			2/1/0/0/0		
MW-VNT-38 34	Process Analysis			2/2/0/0 PL		5
	- Process Analysis			2/2/0/0		

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> 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-VNT-39 <sup>2,</sup></u>	Food and Bioprocess Engineering			4/1/0/0 PL		5
<u>5</u>	- Fundamentals of Bioprocess					
	Engineering			<u>2/1/0/0/0</u>		
	- Food Technology			<del>2/0/0/0/0</del>		
<u>MW-VNT-40</u>	European Course of Cryogenics <sup>5)</sup>			3/0/0/0 PL		5
	- European Course of Cryogenics			3/0/0/0/0		
				within the		
				framework of a		
				3-week block		
				Course		
<u>MW-VNT-41</u> <sup>2</sup>	Clean Room and Clean Media				3/1/0/0 PL	5
	Technology					
	<ul> <li>Membrane Technology</li> </ul>				1/1/0/0/0	
	- Pure Technologies				2/0/0/0/0	
<u>MW-VNT-42 <sup>2,</sup></u>	Process Plants				3/2/0/0 2xPL	5
28, 29, 35	- Apparatus and Installations				2/1/0/0/0	
	- Plant Project Planning				1/1/0/0/0	
<u>MW-VNT-43</u>	Cryogenics <sup>5)</sup>				2/1/0/0 PL	5
	- Cryogenics				2/1/0/0/0	
<u>MW-VNT-44</u> <sup>2</sup>	Environmental Process Engineering				3/2/0/0 PL	5
	- Disposal Technology				2/0/0/0/0	
	- Seminar Environmental Process					
	Engineering				1/2/0/0/0	
<u>MW-VNT-45<sup>2,</sup></u>	Process Control Systems				<del>2/2/0/0 2xPL</del>	5
<u>22</u>	- Process Control Systems				<u>2/2/0/0/0</u>	
<u>MW-VNT-</u>	Food Technology and Bioprocess			4/1/0/0 PL		5
<u>117 <sup>5</sup></u>	Engineering					
	<ul> <li>Fundamentals of Bioprocess</li> </ul>					
	Engineering			2/1/0/0/0		
	- Food Technology			2/0/0/0/0		
MW-VNT-	Resource Technology and Sustainability			4/1/0/0 PL		5
<u>123 <sup>5</sup></u>	- Production-Integrated Environmental					
	Protection			2/0/0/0/0		
	- Solid-fluid Mass Transfer Processes			2/1/0/0/0		
MW-VNT-	Process Control and Optimization				2/2/0/0 2xPL	5
127 <sup>22</sup>	- Process Control and Optimization				2/2/0/0/0	

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester	9 <sup>th</sup> Semester	LP
				(M)	(M)	
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
MW-VNT-	Machine Learning in Chemical			2/2/0/0/0 2xPL		5
<u>128 <sup>25</sup></u>	Engineering			1 SWS Project		
	- Machine Learning in Chemical					
	Engineering			2/2/0/0/0		
Credit points		22	25	15	15	77

## Field of study Bioprocess Engineering <sup>3)</sup>

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
Compulsory m	odules					
<u>MW-VNT-46 <sup>1,</sup></u>	General Microbiology	2/0/0/2/0 2xPL				5
<u>23</u>	- General Microbiology	2/0/0/2/0				
<u>MW-VNT-47 <sup>15</sup></u>	Fundamental Processes of Thermal	2/1/0/1/0 2xPL				5
	Process Engineering					
	- Basic Processes of Thermal Process					
	Engineering	2/1/0/0/0				
	- Process Engineering Internship	0/0/0/1/0				
<u>MW-VNT-48</u>	Biophysics and Bioprocess Engineering	3/0/0/0 PL				5
	Working Methods					
	- Biophysics	1/0/0/0/0				
	- Biotechnical Working Methods	2/0/0/0/0				
<u>MW-VNT-49 <sup>1,</sup></u>	Fundamentals of Bioprocess Engineering		2/3/0/3/0 2xPL			10
<u>3, 6, 23</u>	- Fundamentals of Bioprocess					
	Engineering		2/3/0/3/0			
<u>MW-VNT-50 <sup>2,</sup></u>	Biochemistry for Bioprocess Engineers	2/0/0/4/0 2xPL				7
<u>3, 6, 23</u>	- Biochemistry for Biochemical					
	Engineers	2/0/0/4/0				
<u>MW-VNT-51 <sup>6</sup></u>	Microbiology for Bioprocess Engineers		2/0/0/2/0 2xPL			5
	- Microbiology for Bioprocess engineers		2/0/0/2/0			
<u>MW-VNT-52</u>	Bioanalytics		3/1/0/0 PL			5
	- Fundamentals of molecular bioanalysis		2/1/0/0/0			
	<ul> <li>Monitoring of Bioprocesses</li> </ul>		1/0/0/0/0			
<u>MW-VNT-53</u>	Mechanical Process Engineering and		3/2/0/0 PL			5
	Process Analysis					
	- Mechanical Reconditioning Processes		2/1/0/0/0			
	<ul> <li>Process Analysis and Design of</li> </ul>					
	Experiments		1/1/0/0/0			

V/Ü/S/P/T         V/Ü/S/P/T         V/Ü/S/P/T         V/Ü/S/P/T           Elective modules         Modules amounting to a total of 30 credit points must be selected from the areas of Basic Research and Specialisation, of which modules at least 10 credit points must be selected from the area of Basic Research.           Area of Basic Research         Bioprocess Engineering and Bioreaction         3/2/0/1/0 2xPL           Engineering Bioprocessing         2/1/0/00         2/1/0/00           Bioprocessing         1/1/0/1/0         2/1/0/00           WW-VNT-55         Enzyme and Biosensor Technology         1/1/0/1/0           Bioprocess Engineering         2/1/0/0/0         1/1/0/1/0           MW-VNT-55         White Biotechnology         1/1/0/1/0           Bioprocesses         9/1/0/1/0 2xPL         0/0/1/0/0           Bioprocessing         3/0/0/00         1/0/0/1/0           MW-VNT-55         White Biotechnology         3/0/0/0/0           Bioprocesses         3/0/0/0/0         3/0/0/0/0           Bioprocess Engineering         3/2/0/0/0         3/0/0/0/0           Bioprocess Engineering         3/2/1/0/1/0 2xPL         0/0/1/0/0           Bioprocess Engineering         3/2/1/0/0         3/0/0/0/0           Bioprocess Engineering         3/2/2/0/1/0 PL         3/0/0/0/0	LP
Elective modules         Modules amounting to a total of 30 credit points must be selected from the areas of Basic Research and Specialisation, of which modules at least 10 credit points must be selected from the area of Basic Research.         Area of Basic Research       3/2/0/1/0 2xPL         MW-VNT-54. <sup>5</sup> Bioprocess Engineering and Bioreaction Engineering       2/1/0/0/0        Bioprocessing       1/1/0/1/0         MW-VNT-55       Enzyme and Biosensor Technology       2/1/0/2/0 2xPL         - Enzyme Technology       1/1/0/1/0         - Biosensor Technology       1/1/0/1/0         - Biosensor Technology       1/1/0/1/0         - Biosensor Technology       1/1/0/1/0         - Biotechnology       3/1/0/1/0 2xPL         - Enzyme Technology       3/1/0/1/0 2xPL         - Plant Cell Biotechnology       3/0/1/0/0         - Biotechnology       3/0/1/0/0         - Biotechnology       3/0/1/0/0         - Seminar Biotechnology       3/0/1/0/0         - Biorecessing       3/2/0/1/0 PL         - Biorecessing       3/2/0/1/0 PL         - Biorecessing       3/2/0/1/0 PL         - Biorecessing       3/0/1/0/0         - Biorecessing       3/2/0/1/0 PL         - Biorecessing       3/1/0/1/0 2xPL         - Biorecessing<	-
at least 10 credit points must be selected from the area of Basic Research.         Area of Basic Research         MW-VNT-51*       Bioprocess Engineering and Bioreaction Engineering - Bioreaction Technology - Bioprocessing       3/2/0/1/0 2xPL 2/1/0//0 1/10/0/0         MW-VNT-55       Enzyme and Biosensor Technology - Enzyme Technology       2/1/0/2/0 1/1/0/1/0         MW-VNT-55       Enzyme and Biosensor Technology - Biosensor Technology       1/1/0/1/0         MW-VNT-55*       White Biotechnology - Biosensor Technology       3/1/0/1/0 2xPL 1/1/0/1/0         MW-VNT-56*       White Biotechnology - Plant Cell Biotechnology - Biotechnology       3/1/0/1/0 2xPL 3/0/0/00         MW-VNT-57. <sup>30</sup> Applied Biotechnology - Seminar Biotechnology       3/1/0/1/0 PL 3/1/0/1/0         MW-VNT- 118. <sup>5,27</sup> Special Bioprocess Engineering - Bioprocessing       3/2/2/1/0/0/0 - 0/0/1/0/0         MW-VNT- 2118. <sup>5,27</sup> - Plant Cell Biotechnology - Bioprocess Engineering - Bioprocess Engineering       3/1/0/1/0 2xPL 3/1/0/1/0 2xPL - Plant Cell Biotechnology         MW-VNT- 119. <sup>5,27</sup> Bioprocess Engineering - Bioprocess Engineering - Bioprocess Engineering - Bioprocess Engineering - Bioprocessing       3/1/0/1/0 2xPL 3/1/0/1/0 2xPL - Plant Cell Biotechnology         MW-VNT- 129. <sup>29</sup> Bioprocess Engineering - Bioprocessing       3/1/0/1/0 2xPL 3/1/0/1/0 2xPL - Bioprocessing       3/1/0/1/0 2xPL 3/1/0/1/0 2xPL	
Area of Basic Research       MW-VNT-54-5       Bioprocess Engineering and Bioreaction Engineering       3/2/0/1/0-2xPL        Bioprocessing      Bioprocessing       2/1/0/0/0         MW-VNT-55       Enzyme and Biosensor Technology       2/1/0/2/0 2xPL        Bioprocessing       1/1/0/1/0         MW-VNT-55       Enzyme and Biosensor Technology       1/1/0/1/0        Bioprocessing       1/1/0/1/0         MW-VNT-55       Enzyme Technology       1/1/0/1/0        Bioprocessing       2/1/0/2/0 2xPL        Bioprocessing       1/1/0/1/0         MW-VNT-55       Enzyme Technology        Plant Cell Biotechnology       2/0/0/0/0        Bioprocesses       3/0/1/0/0        Bioprocesses       3/0/1/0/0        Bioprocess Engineering       3/2/0/1/0        Bioprocess Engineering       3/2/0/1/0        Bioprocess Engineering       3/2/0/1/0        Bioprocess Engineering       3/1/0/1/0        Bioprocessing       1/1/0/1/0        Bioprocess Engineering       3/1/0/1/0/2xPL        Bioprocessing       3/1/0/1/0/2xPL        Bioprocessing       3/1/0/1/0/2xPL        Bioprocessing       3/1/0/1/0/2xPL        Plant Cell Biotechnology	mounting to
MW-VNT-54. <sup>5</sup> Bioprocess Engineering and Bioreaction Engineering Bioreaction Technology Bioprocessing       3/2/0/1/0.2xPL         MW-VNT-55       Enzyme and Biosensor Technology Biosensor Technology Biosensor Technology       2/1/0/2/0.2xPL         MW-VNT-55       Enzyme Technology Biosensor Technology       1/1/0/1/0         MW-VNT-55       Enzyme Technology Biosensor Technology       3/1/0/1/0.2xPL         MW-VNT-56. <sup>5</sup> White Biotechnology Plant Cell Biotechnology       3/1/0/1/0.2xPL         MW-VNT-57. <sup>30</sup> Applied Biotechnology Seminar Biotechnology       3/0/1/0/0         MW-VNT-57. <sup>30</sup> Applied Biotechnology Bioreaction Technology       3/2/0/1/0 PL         118. <sup>5,27</sup> Bioreaction Technology Bioprocessing       3/2/0/1/0 PL         119. <sup>5,57</sup> Bioreaction Technology Plant Cell Biotechnology       3/1/0/1/0 2xPL         119. <sup>5,57</sup> Bioprocessing       3/1/0/1/0         MW-VNT- 119. <sup>5,27</sup> Bioprocess Engineering Plant Cell Biotechnology       3/1/0/1/0         MW-VNT- 129. <sup>25</sup> Bioprocessing Bioprocessing       3/1/0/1/0 2xPL         129. <sup>25</sup> Bioprocessing Bioprocessing       3/1/0/1/0 2xPL         129. <sup>25</sup> Bioprocessing Bioprocessing       3/1/0/1/0 2xPL         129. <sup>26</sup> Bioprocessing Bioprocessing       3/1/0/1/0         Biop	-
Engineering BioprocessingEngineering 2/1/0/00 1/1/0/1/02/1/0/00 2/1/0/0/0MW-VNT-55Enzyme and Biosensor Technology - Enzyme Technology - Biosensor Technology - Biosensor Technology - Plant Cell Biotechnology - Biotechnology2/1/0/2/0 2xPL 1/1/0/1/0MW-VNT-56White Biotechnology - Plant Cell Biotechnology - Biostenknich Processes - Seminar Biotechnology3/1/0/1/0 2xPL 1/1/0/1/0MW-VNT-57Special Bioprocess Engineering - Bioprocessing3/2/0/1/0 PL 3/2/0/1/0 PL 2/1/0/00MW-VNT- 119.5-27Special Bioprocess Engineering - Plant Cell Biotechnology - Bioprocessing3/2/0/1/0 PL 3/2/0/1/0 PL 2/1/0/00MW-VNT- 119.5-27Special Biotechnology - Bioprocess Engineering - Plant Cell Biotechnology - Bioprocessing3/1/0/1/0 2xPL 2/1/0/00MW-VNT- 119.5-27Special Bioprocess Engineering - Bioprocessing3/1/0/1/0 2xPL 2/1/0/00MW-VNT- 119.5-27Chapter of White Biotechnology - Plant Cell Biotechnology - Energy Biotechnology - Energy Biotechnology - Energy Biotechnology - Plant Cell Biotechnology - Energy	
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MW-VNT-55Enzyme and Biosensor Technology - Enzyme Technology - Biosensor Technology - Biosensor Technology2/1/0/2/0 2xPL 1/1/0/1/0 1/0/0/1/0MW-VNT-56-5White Biotechnology - Plant Cell Biotechnology - Energy Biotechnology - Biotechnology3/4/0/1/0 2xPL - 4/1/0/1/0 2/00/0/0MW-VNT-57-30Applied Biotechnology - Biotechnology - Biotechnology - Biotechnology3/0/1/0/0 PL - 3/0/1/0/0 PL - 3/0/0/0/0MW-VNT-57-30Applied Biotechnology - Biotechnology - Biotechnology - Biotechnology3/2/0/1/0 PL - 2/1/0/0/0MW-VNT- - Bioreaction Technology - Bioprocessing3/2/0/1/0 PL - 2/1/0/0/03/0/1/0/0MW-VNT- - Bioprocessing3/1/0/1/0 2xPL - Plant Cell Biotechnology - 2/1/0/0/03/1/0/1/0 2xPL - 1/1/0/1/0MW-VNT- - 129Chapter of White Biotechnology - Plant Cell Biotechnology - Plant Cell Biotechnology3/1/0/1/0 2xPL - 1/1/0/1/0MW-VNT- - Bioprocess Engineering - Bioprocessing3/1/0/1/0 2xPL - 1/1/0/1/0MW-VNT- - 129Bioprocess Engineering - Plant Cell Biotechnology - Energy Biotechnology - Plant Cell Biotechnology - 2/0/0/003/1/0/1/0 2xPL - 1/1/0/1/0MW-VNT- - 129Bioprocess Engineering - Bioprocessing - Bioprocessing3/1/0/1/0 2xPL - 2/0/0/00	
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- Biosensor Technology1/0/0/1/0MW-VNT-56-5White Biotechnology - Plant Cell Biotechnology - Energy Biotechnology3/1/0/1/0 2xPL 1/1/0/1/0MW-VNT-57-30Applied Biotechnology2/0/0/00MW-VNT-57-30Applied Biotechnology3/0/1/0/ PL 3/0/1/0/ PL- Biotechnical Processes3/2/0/1/0 PL 0/0/1/0/0- Seminar Biotechnology0/0/1/0/ PL 0/0/1/0/0MW-VNT- 57-27Special Bioprocess Engineering - Bioreaction Technology3/2/0/1/0 PL 2/1/0/0/0MW-VNT- 119- <sup>5,27</sup> - Bioreaction Technology - Plant Cell Biotechnology3/1/0/1/0 2xPL 2/1/0/0/0MW-VNT- 119- <sup>5,27</sup> Chapter of White Biotechnology - Plant Cell Biotechnology3/1/0/1/0 2xPL 2/0/0/0MW-VNT- 119- <sup>5,27</sup> Gioprocess Engineering - Plant Cell Biotechnology - Bioprocess Engineering - Bioprocess Engineering3/1/0/1/0 2xPL 2/0/0/0MW-VNT- 129-25Bioprocess Engineering - Bioprocess Engineering - Bioprocess Engineering3/1/0/1/0 2xPL 2/0/0/0MW-VNT- 129-25Bioprocess Engineering - Bioprocess Engineering - Bioprocess Engineering3/1/0/1/0 2xPL 2/0/0/0MW-VNT- 129-25Bioprocess Engineering - Bioprocess Engineering - Bioprocess Engineering3/1/0/1/0 2xPL 2/0/0/0	5
MW-VNT-56-5White Biotechnology - Plant Cell Biotechnology - Energy Biotechnology3/1/0/1/0 2xPL 1/1/0/1/0 2/0/0/0/0MW-VNT-57-30Applied Biotechnology - Biotechnical Processes - Seminar Biotechnology3/0/1/0/ PL 3/0/1/0/ PL 2/1/0/0/0 0/0/1/0/0MW-VNT- - Bioreaction Technology - BioprocessingSpecial Bioprocess Engineering 1/1/0/1/03/2/0/1/0 PL 2/1/0/0/0 0/0/1/0/0MW-VNT- 118-5-27 - BioprocessingSpecial Bioprocess Engineering - Bioprocessing3/1/0/1/0 2xPL 2/1/0/0/0 1/1/0/1/0MW-VNT- 119-5, 27 - Plant Cell Biotechnology - Energy Biotechnology - Bioprocess Engineering - Bioprocessing - Bioproces	
Plant Cell Biotechnology Energy Biotechnology1/1/0/1/0 2/0/0/0MW-VNT-57 30 - Biotechnical Processes - Seminar Biotechnology - Secial Bioprocess Engineering Bioreaction Technology3/0/1/0/ PL 3/0/0/0 0/0/1/0/0MW-VNT- 118 5-27 BioprocessingSpecial Bioprocess Engineering Bioprocessing3/2/0/1/0 PL 2/1/0/0/0MW-VNT- BioprocessingBioprocessingBioprocessingMW-VNT- 119 5+27 Plant Cell BiotechnologyBioprocessingBioprocessingMW-VNT- 119 5+27 Bioprocess Engineering BioprocessingBioprocessingBioprocessingMW-VNT- 119 5+27 Plant Cell Biotechnology Bioprocess Engineering Bioprocess Engineering Bioprocess EngineeringBioprocessingBioprocessingMW-VNT- 129 25 BioprocessingBioprocess Engineering BioprocessingBioprocessingBioprocessingMW-VNT- 129 25 BioprocessingBioprocess Engineering BioprocessingBioprocessingBioprocessingMW-VNT- 129 25 	
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MW-VNT-57 30Applied Biotechnology - Biotechnical Processes - Seminar Biotechnology3/0/1/00 PL 3/0/0/0 0/0/1/0/0MW-VNT- 118 5r.27 - BioprocessingSpecial Bioprocess Engineering - Bioprocessing3/2/0/1/0 PL 2/1/0/04 1/1/0/1/0MW-VNT- 119 5r.27 - Plant Cell Biotechnology - Energy BiotechnologyChapter of White Biotechnology 2/0/0/043/1/0/1/0 2xPL 2/0/0/04MW-VNT- 129 25 - BioprocessingBioprocess Engineering - Plant Cell Biotechnology 2/0/0/043/1/0/1/0 2xPL 2/0/0/04MW-VNT- 129 25 - BioprocessingBioprocess Engineering - Bioprocessing3/1/0/1/0 2xPL 1/1/0/1/0MW-VNT- 129 25 - BioprocessingBioprocess Engineering - Bioprocessing3/1/0/1/0 2xPL 2/0/0/04	
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MW-VNT- 118-5-27Special Bioprocess Engineering - Bioprocessing3/2/0/1/0 PL 2/1/0/00 1/1/0/1/0MW-VNT- 119-5-27Chapter of White Biotechnology - Plant Cell Biotechnology - Plant Cell Biotechnology3/1/0/1/0 2xPL 1/1/0/1/0MW-VNT- 119-5-27Chapter of White Biotechnology - Plant Cell Biotechnology 2/0/0/003/1/0/1/0 2xPL 2/0/0/00MW-VNT- 129Bioprocess Engineering - Bioprocessing3/1/0/1/0 2xPL 2/0/0/00MW-VNT- 129Bioprocess Engineering - Bioprocessing - Bioprocessing3/1/0/1/0 2xPL 2/0/0/00	
118Bioreaction Technology Bioprocessing2/1/0/00 1/10/1/0MW-VNT- 119-5, 27 Plant Cell Biotechnology Energy Biotechnology 	
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119-5, 27Plant Cell Biotechnology1/1/0/1/0Energy Biotechnology2/0/0/0/0MW-VNT- 129 25Bioprocess Engineering3/1/0/1/0 2xPLBioprocessing1/1/0/1/0Biorefinery Technology2/0/0/0/0	
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MW-VNT- 129Bioprocess Engineering - Bioprocessing - Biorefinery Technology3/1/0/1/0 2xPL 1/1/0/1/0 2/0/0/00	
129 <sup>25</sup> - Bioprocessing     1/1/0/1/0       - Biorefinery Technology     2/0/0/0/0	
- Biorefinery Technology 2/0/0/0/0	5
- Biorefinery Technology 2/0/0/0	
<u>MW-VNT-</u> Bioreaction Engineering 2/1/1/0/0 PL	5
130 <sup>25</sup> - Bioreaction Engineering   2/1/0/0/0	
- Bioreaction Seminar 0/0/1/0/0	
Area of Specialisation	
MW-VNT-38 <sup>34</sup> Process Analysis     2/2/0/0 PL	5
- Process Analysis 2/2/0/0	
MW-VNT-42 <sup>2,</sup> Process Plants 3/2/0/0 2xPL	5
28, 29, 35 - Apparatus and Installations 2/1/0/0/0	
- Plant Project Planning 1/1/0/0/	

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
MW-VNT-44 <sup>2</sup>	Environmental Process Engineering				3/2/0/0 PL	5
	- Disposal Technology				2/0/0/0/0	
	- Seminar Environmental Process					
	Engineering				1/2/0/0/0	
<u>MW-VNT-58-</u> 4	Biotechnical Plants and Processes			3/1/0/1/0 2xPL		5
	- Project Planning of Biotechnical Plants			<del>1/1/0/1/0</del>		
	- Continuous Bioprocesses			<del>2/0/0/0/0</del>		
<u>MW-VNT-59</u> ⁵	Downstream Processing in				3/1/0/0 2xPL	5
	Biotechnology					
	<ul> <li>Membrane Technology</li> </ul>				<del>1/1/0/0/0</del>	
	<ul> <li>Special Bioprocessing Technology</li> </ul>				<del>2/0/0/0/0</del>	
<u>MW-VNT-60</u> <sup>7</sup>	Food Engineering for Bioprocess			4/0/0/0 PL		5
	Engineers					
	<ul> <li>Food Physics / Rheology</li> </ul>			2/0/0/0/0		
	- Food Technology			2/0/0/0/0		
<u>MW-VNT-61</u>	Chemometrics				2/1/0/0 2xPL	5
	- Chemometrics				2/1/0/0/0	
<u>MW-VNT-62</u>	Systems Biotechnology and Synthetic			#/#/#/# PL <sup>4)</sup>	#/#/#/# PL <sup>4)</sup>	5
	Biology			(3)	(2)	
<u>MW-VNT-</u>	Automation and Control of Biotechnical			#/#/#/# PL <sup>7)</sup>	#/#/#/# PL <sup>7)</sup>	5
<u>115 <sup>4</sup></u>	Processes					
MW-VNT-	Processing in Biotechnology				3/1/0/0 2xPL	5
<u>122 <sup>5</sup></u>	- Membrane Technology				1/1/0/0/0	
	- Special Bioprocessing Technology				2/0/0/0/0	
<b>Credit points</b>		25	22	13 or 15	15 or 17	77

## Field of study Chemical Engineering <sup>3)</sup>

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
Compulsory m	odules					
MW-VNT-23 <sup>1</sup>	Fundamentals of Mechanical and Thermal Process Engineering - Basic Processes of Mechanical Process	4/2/0/0 PL				7
	Engineering - Basic Processes of Thermal Process	2/1/0/0/0				
	Engineering	2/1/0/0/0				
MW-VNT-24 <sup>6,</sup> 28	Fundamentals of Chemical Process Engineering	2/2/0/1/0 2xPL				5
	<ul><li>Fundamentals of Reaction Engineering</li><li>Process Engineering Internship</li></ul>	2/2/0/0/0 0/0/0/1/0				
<u>MW-VNT-27</u>	Fluid Mechanics for Mechanical Process Engineering		2/2/0/0 PL			5
	- Flow Problems in Mechanical Process Engineering		2/2/0/0/0			
<u>MW-VNT-28 15</u>	Consolidation and Application of Thermal Process Engineering		4/1/0/0 PL			5
	<ul><li>Thermal Process Engineering</li><li>Environmental Technology</li></ul>		2/1/0/0/0 2/0/0/0/0			
<u>MW-VNT-30 <sup>6,</sup> 28</u>	Multiphase Reactions - Multiphase Reactions - Process Engineering Internship		2/1/0/1/0 2xPL 2/1/0/0/0 0/0/0/0/1			5
<u>MW-VNT-63</u>	Analytical Chemistry - Analytical Chemistry - Practical Course General Chemistry	2/0/0/2/0 2xPL 2/0/0/0/0 0/0/0/2/0				5
<u>MW-VNT-64<sup>21,</sup> 33</u>	Industrial Chemistry - Technical Chemistry	2/1/0/0 PL 2/1/0/0/0				5
MW-VNT-64 <sup>21,</sup> 33	Industrial Chemistry - Sustainable aspects of industrial and circular chemistry	2/0/0/0 PL 2/0/0/0				5
<u>MW-VNT-65</u>	Fundamental Chemical Analysis - Practical Course Analytical Chemistry - Practical Course Organic Chemistry/Biochemistry		0/1/0/4/0 2xPL 0/1/0/1/0 0/0/0/3/0			5
<u>MW-VNT-66</u>	Chemical Processes and Material Separation Operations - Chemical Processes and Substance Separation Operations		0/0/0/3/0 2xPL 0/0/0/3/0			5

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
Elective modu	iles			·		
Modules amou	inting to a total of 30 credit points must be se	lected from the area	as of Basic Research	and Specialisation, o	of which modules amo	ounting to
at least 10 cred	lit points must be selected from the area of B	asic Research.				
Area of Basic	Research					
<u>MW-VNT-25 <sup>1,</sup></u>	Plant Engineering and Safety Engineering				4/0/0/0 PL	5
<u>6, 28, 35</u>	- Plant Engineering				2/0/0/0/0	
	- Security Technology				2/0/0/0/0	
<u>MW-VNT-67 <sup>2,</sup></u>	High-performance Materials			4/1/0/0 PL		5
9	- Inorganic Materials			2/1/0/0/0		
	- Ceramic Materials			2/0/0/0/0		
<u>MW-VNT-68</u>	Macromolecular Chemistry			2/0/0/0 PL	2/0/0/0 PL	5
	- Macromolecular Chemistry			2/0/0/0/0	2/0/0/0/0	
<u>MW-VNT-69</u>	Chemical-technical Fundamentals of				2/0/0/2/0 2xPL	5
	Renewable Energy					
	- Chemical-technical Basics of					
	Regenerative Energy Production				2/0/0/2/0	
Area of Specia						
<u>MW-VNT-26</u>	Heat Transfer and Mass Transfer				2/2/0/0 PL	5
	- Heat Transfer and Mass Transfer				2/2/0/0/0	
<u>MW-VNT-29</u>	System Process Engineering			2/2/0/0 PL		5
<u>6, 16, 23</u>	<ul> <li>Process Analysis and Design of</li> </ul>					
	Experiments			1/1/0/0/0		
	- Systems Process Engineering			1/1/0/0/0		
<u>MW-VNT-31</u>	Chemical Thermodynamics and			2/2/0/0 PL		5
<u>6, 16</u>	Multiphase Thermodynamics					
	- Chemical Thermodynamics and					
	Multiphase Thermodynamics			2/2/0/0/0		
<u>MW-VNT-35 15,</u>	Energy Process Engineering				2/1/0/0 2xPL	5
<u>29</u>	- Energetic Process Integration				0/1/0/0/0	
	- Thermo-economic Modelling				2/0/0/0/0	
<u>MW-VNT-39-<sup>2,</sup></u>	Food and Bioprocess Engineering			4/1/0/0 PL		5
<u>5</u>	- Fundamentals of Bioprocess					
	Engineering			<del>2/1/0/0/0</del>		
	- Food Technology			<del>2/0/0/0/0</del>		
<u>MW-VNT-61</u>	Chemometrics				2/1/0/0 2xPL	5
	- Chemometrics				2/1/0/0/0	

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> 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-VNT-70</u>	Particles and Interfaces			4/1/0/0 PL		5
	- Particle Measurement Technology			2/1/0/0/0		
	- Interfacial Phenomena			2/0/0/0/0		
<u>MW-VNT-71<sup>-20</sup></u>	Water Technology			4/0/0/0 2xPL		5
	- Chemical Water Technology			<del>2/0/0/0/0</del>		
				<del>2/0/0/0/0</del>		
<u>MW-VNT-72</u>	Chemistry of Food: Reactions and			4/0/0/0 PL		5
	Functionalities of Ingredients, Residues					
	and Packaging					
	- Ingredients			2/0/0/0/0		
	<ul> <li>Residues and Packaging</li> </ul>			2/0/0/0/0		
<u>MW-VNT-73</u>	Biomimetic Material Synthesis				2/1/0/1/0 2xPL	5
	- Biomimetic Material Synthesis				2/1/0/1/0	
MW-VNT-	Food Technology and Bioprocess			4/1/0/0 PL		5
<u>117 <sup>5</sup></u>	Engineering					
	- Fundamentals of Bioprocess			2/1/0/0/0		
	Engineering					
	- Food Technology			2/0/0/0/0		
<u>MW-VNT-121</u>	Reaction Control and Reactor Technology			3/2/0/0/0 2xPL		5
<u>5, 15, 16, 17, 29, 35</u>	- Reaction Control			2/1/0/0/0		
	- Reactor Simulation			1/1/0/0/0		
<u>MW-VNT-126</u>	Chemical Water Technology				4/0/0/0/0 PL	5
<u>20, 26</u>	- Water Quality and Water Treatment				2/0/0/0/0	
	- Water Constituents II				2/0/0/0/0	
MW-VNT-	Machine Learning in Chemical			2/2/0/0/0 2xPL		5
128 <sup>25</sup>	Engineering			1 SWS Project		
	- Machine Learning in Chemical					
	Engineering			2/2/0/0/0		
<b>Credit points</b>	5	22	25	15	15	77

## Field of study Wood and Fibre Material Technology <sup>3)</sup>

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
Compulsory m	odules					
<u>MW-VNT-47 <sup>15</sup></u>	Fundamental Processes of Thermal Process Engineering	2/1/0/1/0 2xPL				5
	- Basic Processes of Thermal Process					
	Engineering	2/1/0/0/0				
	- Process Engineering Internship	0/0/0/1/0				
<u>MW-VNT-53</u>	Mechanical Process Engineering and Process Analysis		3/2/0/0 PL			5
	<ul> <li>Mechanical Reconditioning Processes</li> <li>Process Analysis and Design of</li> </ul>		2/1/0/0/0			
	Experiments		1/1/0/0/0			
<u>MW-VNT-74</u>	Chemical Fundamentals of Wood and Fibre Materials Technology - Chemical Basics of Wood Technology	2/2/0/0 2xPL				5
	and Fibre Materials Technology	2/2/0/0/0				
<u>MW-VNT-75<sup>2</sup></u>	Fundamentals of Wood Anatomy - Basics of Wood Anatomy	3/1/0/1/0 2xPL 3/1/0/1/0				5
<u>MW-VNT-76 <sup>1,</sup></u> 2	<ul> <li>Basic Processes of Manufacturing and</li> <li>Processing of Wood-based Materials and</li> <li>Paper</li> <li>Basic Processes in the Production and</li> <li>Processing of Wood-based Materials</li> <li>and Paper</li> </ul>	8/0/0/0 PL 8/0/0/0/0				10
<u>MW-VNT-77</u>	Physical Fundamentals of Wood Technology and Paper Technology - Physical Fundamentals of Wood		3/1/0/1/0 2xPL			7
	Technology and Paper Technology		3/1/0/1/0			
<u>MW-VNT-78 <sup>1</sup></u>	Technology of Wood-based Materials Manufacturing and Paper Manufacturing - Technology of Wood-based Material		2/0/0/2/0 2xPL			5
	Production and Paper Production		2/0/0/2/0			

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> 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-VNT-79</u>	Technology of Wood-based Materials		2/0/0/2/0 2xPL			5
	Processing and Paper Processing					
	- Technology of Wood-based Material					
	Processing and Paper Processing		2/0/0/2/0			
<b>Elective modu</b>	les					
Modules amou	nting to a total of 30 credit points must be se	elected from the are	as of Basic Research	and Specialisation, c	of which modules amo	ounting to
at least 10 cred	it points must be selected from the area of E	Basic Research.		-		-
Area of Basic F	Research					
MW-VNT-80 <sup>31</sup>	Development of Furniture and Building			3/2/0/0 2xPL		5
	Elements					
	- Furniture and Construction Element					
	Development			3/2/0/0/0		
MW-VNT-81 29	Wood Preservation			3/1/0/0 2xPL		5
	- Wood Preservation			3/1/0/0/0		
MW-VNT-82 <sup>2</sup>	Machines and Processes in Paper			3/0/0/1/0 2xPL		5
	Manufacturing					
	- Machines and Processes of Paper					
	Production			3/0/0/1/0		
MW-VNT-83 <sup>2</sup>	Machines and Processes in Paper			3/0/0/1/0 2xPL		5
	Processing					
	- Paper Converting Machines and					
	Processes			3/0/0/1/0		
MW-VNT-84 13,	Wood Drying and Modification				2/3/0/0 2xPL	5
<u>31</u>	- Wood Drying				1/2/0/0/0	
	- Wood Modification				1/1/0/0/0	
MW-VNT-85 29	Scientific Work in Wood Technology				1/0/0/3/0 2xPL	5
	- Scientific Work in Wood Technology				1/0/0/3/0	
MW-VNT-86	Fiber and Paper Physics				3/0/0/1/0 2xPL	5
_	- Fibre Physics and Paper Physics				3/0/0/1/0	
Area of Specia			•	•	· ·	
MW-VNT-38 34	Process Analysis			2/2/0/0 PL		5
	- Process Analysis			2/2/0/0		

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
MW-VNT-39 <sup>2,</sup>	Food and Bioprocess Engineering			4/1/0/0 PL		5
5	- Fundamentals of Bioprocess					
	Engineering			<del>2/1/0/0/0</del>		
	- Food Technology			<del>2/0/0/0/0</del>		
MW-VNT-87 29	Coating and Bonding Technologies			2/0/0/2/0 2xPL		5
	- Surface Finishing			1/0/0/1/0		
	- Adhesive Technology			1/0/0/1/0		
<u>MW-VNT-88</u> <sup>29</sup>	Timber Construction			2/1/0/0 2xPL		5
	- Timber Construction			2/1/0/0/0		
MW-VNT-89 14	Introduction to Industrial Design			2/0/0/2/0 2xPL		5
	Methodology					
	Basics of the Design Process and -Tools			2/0/0/2/0		
MW-VNT-90 <sup>14</sup>	Design Fundamentals			2/0/0/3/0 PL		5
	- Design Basics			<del>2/0/0/3/0</del>		
MW-VNT-91	Paper and Cellulose Chemistry			2/0/0/2/0 2xPL		5
	- Paper and Cellulose Chemistry			2/0/0/2/0		
MW-VNT-92	Innovative Fiber-Based Bioproducts			2/0/0/2/0 2xPL		5
	- Innovative Fiber-Based Bioproducts			2/0/0/2/0		
MW-VNT-93 28,	Manufacturing of Fibre Composites				3/2/0/0 PL	5
<u>29</u>	- Technologies for Thermoplastic					
	Composites				1/1/0/0/0	
	- Technologies for Thermoset					
	Composites				2/1/0/0/0	
<u>MW-VNT-94</u> 29	Designing with Polymers				4/0/0/0 PL	5
	- Design Suitable for Plastics				2/0/0/0/0	
	- Special Problems in Plastics					
	Technology				2/0/0/0/0	
<u>MW-VNT-95 <sup>29</sup></u>	Product Manufacturing				3/0/0/1/0 2xPL	5
	<ul> <li>Production Facility Planning</li> </ul>				2/0/0/0/0	
	- Furniture and Construction Element					
	Production				1/0/0/1/0	
<u>MW-VNT-96 <sup>29</sup></u>	Cutting Technology				2/0/0/2/0 2xPL	5
	- Production Automation				1/0/0/0/0	
	<ul> <li>Machining and CNC Technology</li> </ul>				1/0/0/2/0	
<u>MW-VNT-97</u> <sup>2</sup>	Special Process and Control Strategies in				2/0/0/2/0 2xPL	5
	Paper Production					
	- Special Process and Control Strategies					
	in Paper Technology				2/0/0/2/0	

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> 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-VNT-98</u>	Paper Loops and Treatment of Paper for Recycling - Paper Loops and Treatment of Paper				2/0/0/2/0 2xPL	5
	for Recycling				2/0/0/2/0	
<u>MW-VNT-117</u> 5	<ul> <li>Food Technology and Bioprocess</li> <li>Engineering</li> <li>Fundamentals of Bioprocess</li> <li>Engineering</li> <li>Food Technology</li> </ul>			4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0		5
<u>MW-VNT-124</u> <u>14</u>	Industrial Design Methodology - Industrial Design Methodology			2/0/0/2/0 2xPL 2/0/0/2/0		5
<u>MW-VNT-125</u> <u>14</u>	Two-Dimensional Design Fundamentals - Two-Dimensional Design Fundamentals			2/0/0/3/0 PL 2/0/0/3/0		5
Credit points	5	25	22	15	15	77

## Field of study Food Engineering <sup>3)</sup>

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
Compulsory m	odules	·	·	·		
<u>MW-VNT-47 <sup>15</sup></u>	Fundamental Processes of Thermal Process Engineering - Basic Processes of Thermal Process	2/1/0/1/0 2xPL				5
	Engineering - Process Engineering Internship	2/1/0/0/0 0/0/0/1/0				
<u>MW-VNT-53</u>	Mechanical Process Engineering and Process Analysis - Mechanical Reconditioning Processes - Process Analysis and Design of Experiments		3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0			5
<u>MW-VNT-99 <sup>6</sup></u>	Fundamentals of Food Engineering - Introduction Food Technology - Introduction Food Technology	4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0				5
<u>MW-VNT-</u> <u>100 <sup>6</sup></u>	Refrigeration Technology - Food Science 1 - General Microbiology	4/0/0/0 2xPL 2/0/0/0/0 2/0/0/0/0				5
<u>MW-VNT-101</u>	Fundamentals of Food Chemistry - Fundamentals of Food Chemistry	4/1/0/3/0 2xPL 4/1/0/3/0				10
<u>MW-VNT-</u> 102 <sup>6</sup>	Generic Food Technology - General Food Technology		3/0/0/0 PL 3/0/0/0/0			5
<u>MW-VNT-</u> 103 <sup>6</sup>	Unit Operations in Food Engineering - Basic Food Technology Procedures		2/0/0/2/0 2xPL 2/0/0/2/0			5
<u>MW-VNT-</u> 104 <sup>2, 6</sup>	Food Microbiology and Hygiene - Food Science 2 - Food Microbiology		4/0/0/2/0 2xPL 2/0/0/0/0 2/0/0/2/0			7
Elective modu	les					
	nting to a total of 30 credit points must be se it points must be selected from the area of E		as of Basic Research	and Specialisation, o	f which modules am	ounting to
Area of Basic F	Research					
<u>MW-VNT-105</u> <u>5</u>	Food Rheology - Food Rheology			<del>2/0/0/2/0 2xPL</del> <del>2/0/0/2/0</del>		5

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
MW-VNT-106	Quality Assurance in the Food Industry			2/1/1/0/0 2xPL		5
<u>29</u>	- Sensor Technology and Quality					
	Management			2/1/0/0/0		
	- Food Technology Seminar			0/0/1/0/0		
MW-VNT-107	Bioprocess Engineering for Food			3/1/0/0 PL		5
<del>2, 5</del>	Engineers					
	- Bioprocess Engineering for Food					
	technicians			3/1/0/0/0		
<u>MW-VNT-108</u>	Special Topics in Food Technology				3/0/1/1/0 2xPL	5
<u>29</u>	- Beverage Technology				2/0/0/0/0	
	- Food Technology Seminar				0/0/1/0/0	
	- Technofunctional additives				1/0/0/1/0	
MW-VNT-116	Bioprocess Engineering Fundamentals			3/2/0/0 PL		5
5	for Food Engineers					
	- Fundamentals of Bioprocess					
	Engineering			2/1/0/0/0		
	- Enzyme Technology			1/1/0/0/0		
MW-VNT-120	Food Rheology			2/0/0/2/0 2xPL		5
<u>5</u>	- Food Rheology			2/0/0/2/0		
Area of Specia	lisation			•	•	
MW-VNT-25 <sup>1,</sup>	Plant Engineering and Safety Engineering				4/0/0/0 PL	5
<u>6, 28, 35</u>	- Plant Engineering				2/0/0/0/0	
	- Security Technology				2/0/0/0/0	
MW-VNT-38 34	Process Analysis			2/2/0/0 PL		5
	- Process Analysis			2/2/0/0		
	, ,					
MW-VNT-42 <sup>2,</sup>	Process Plants				3/2/0/0 2xPL	5
<u>28, 29, 35</u>	- Apparatus and Installations				2/1/0/0/0	
	- Plant Project Planning				1/1/0/0/0	
<u>MW-VNT-44</u> <sup>2</sup>	Environmental Process Engineering				3/2/0/0 PL	5
<u></u>	- Disposal Technology				2/0/0/0/0	-
	- Seminar Environmental Process					
	Engineering				1/2/0/0/0	
MW-VNT-61	Chemometrics				2/1/0/0 2xPL	5
	- Chemometrics				2/1/0/0/0	-
MW-VNT-109	Food Packaging				4/0/0/0 PL	5
	- Packaging Machines				2/0/0/0/0	-
	- Packaging Materials				2/0/0/0/0	

Module no.	Module name	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	8 <sup>th</sup> Semester (M)	9 <sup>th</sup> Semester (M)	LP
		V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	V/Ü/S/P/T	
MW-VNT-	Refrigeration Technology			2/2/0/0 PL		5
<u>110<sup>2, 28</sup></u>	- Refrigeration			2/2/0/0/0		
<u>MW-VNT-111</u>	Applied Biochemistry and Nutrional			2/0/0/0 PL	2/0/0/0 PL	5
	Physiology					
	- Applied Biochemistry and Nutritional					
	Physiology			2/0/0/0/0	2/0/0/0/0	
<u>MW-VNT-112</u>	Membrane Technology and Particle			2/0/0/0 PL	1/1/0/0 PL	5
	Technology					
	- Particle Measurement Technology			2/0/0/0/0		
	<ul> <li>Membrane Technology</li> </ul>				1/1/0/0/0	
<u>MW-VNT-113</u>	Machine Technology in the Food Industry				4/0/0/0 PL	5
	<ul> <li>Food Processing Machinery</li> </ul>				2/0/0/0/0	
	- Industrial Hygiene and Cleaning					
	Technology				2/0/0/0/0	
<u>MW-VNT-114</u>	Principles of Refrigeration				2/2/0/0 PL	5
<u>28</u>	- Principles of Refrigeration				2/2/0/0/0	
Credit points		25	22	15	15	77

#### Annex

- V Lecture
- Ü Exercise
- P Practical course
- S Seminar
- SK Language course
- T Tutorial
- E Excursion
- PL Exam performance(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
- \* Alternatively, according to choice of field of study.
- <sup>1)</sup> Alternatively, at the student's choice, Courses totalling 4 SWS including the examination performances specified in accordance with the catalogue General and Engineering-Specific Qualifications in Process and Natural Materials Engineering.
- <sup>2)</sup> Alternatively, at the student's choice, Courses totalling 8 SWS including the examination performances specified in accordance with the catalogue Interdisciplinary Technical Qualification for Process Engineering and Natural Materials Technology.
- <sup>3)</sup> Alternatively, at the student's choice, one of five fields of study.
- <sup>4)</sup> Alternatively, at the student's choice, Courses totalling 4 SWS including the examinations specified in the Systems Biotechnology and Synthetic Biology catalogue.
- <sup>5)</sup> Alternatively, at the student's choice, the module MW-VNT-40 or MW-VNT-43 can be chosen.
- <sup>6)</sup> Alternatively, at the student's choice, the module MW-VNT-110 or MW-VNT-114 can be chosen.
- <sup>7)</sup> Alternatively, at the student's choice, Courses with a total volume of 4 SWS including the examination performances specified according to the catalogue Automation and Control of Biotechnical Processes.
- Extension according to § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Programme in Process and Natural Materials Engineering of 29 April 2019, the Bachelor Programme in Process and Natural Materials Engineering of 28 April 2019 or Diploma Postgraduate Programme in Process and Natural Materials Engineering of 15 February 2020 according to the decision of the Faculty Council of 15 April 2020 Adjustment in the field Usability.
- <sup>2</sup> Extension according to § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Programme in Process Engineering and Natural Materials Engineering of 29 April 2019, the Bachelor Programme in Process Engineering and Natural Materials Engineering of 28 April 2019 or Diploma Postgraduate Programme in Process Engineering and Natural Materials Engineering of 15 February 2020 according to the decision of the Faculty Council of 15 April 2020 Adjustment in the field Requirements for participation.
- <sup>3</sup> Extension according to § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Programme Process Engineering and Natural Materials Technology of 29 April 2019, the Bachelor Programme Process Engineering and Natural Materials Technology of 28 April 2019 or Diploma Postgraduate Programme Process Engineering and Natural Materials Technology of 15 February 2020 according to the decision of the Faculty Council of 15.04.2020 Frequency of the module.
- <sup>4</sup> Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma Programme in Process Engineering and Natural Materials Technology of 29 April 2019 or Diploma Postgraduate Programme in Process Engineering and Natural Materials Technology of 15 February 2020 in accordance with the resolution of the Faculty Council of 15.04.2020 Replacing the teaching offer.

- Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma Programme in Process Engineering and Natural Materials Technology of 29 April 2019 or Diploma Postgraduate Programme in Process Engineering and Natural Materials Technology of 15 February 2020 in accordance with the resolution of the Faculty Council of 17.03.2021 Replacing the teaching offer.
- <sup>6</sup> Extension according to § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Programme in Process Engineering and Natural Materials Technology of 29 April 2019, the Bachelor Programme in Process Engineering and Natural Materials Technology of 28 April 2019 or the Diploma Postgraduate Programme in Process Engineering and Natural Materials Materials Technology of 15 February 2020 in accordance with the resolution of the Faculty Council of 17 March 2021 Adjustment in the field of usability.
- 7 Extension according to § 6 Abs. 6 and § 10 Abs. 2 Studienordnung für den Diplomstudiengang Verfahrenstechnik und Naturstofftechnik of April 29, 2019 or Diplom-Aufbaustudiengang Verfahrenstechnik und Naturstofftechnik of February 15, 2020 according to the decision of the Faculty Council of March 17, 2021 Frequency of the module.
- <sup>8</sup> Correction of the semester-based SWS distribution.
- <sup>9</sup> Adjustment of assigned Courses, 24.03.2021.
- <sup>10</sup> Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma Programme in Materials Science of 29 April 2019 or Bachelor's Programme in Materials Science of 28 April 2019 in accordance with the resolution of the Faculty Council of 15.04.2020 Adjustment in the field Usability.
- <sup>11</sup> Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma Programme in Materials Science of 29 April 2019 or Bachelor's Programme in Materials Science of 28 April 2019 in accordance with the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Usability.
- <sup>12</sup> Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma Programme in Mechanical Engineering of 17 May 2019 or Bachelor's Programme in Mechanical Engineering of 17 May 2019 or Diploma Postgraduate Programme in Mechanical Engineering of 17 January 2020 in accordance with the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Usability.
- <sup>13</sup> Correction of SWS distribution and merging of courses.
- <sup>14</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 20.10.2021 Replacing the range of courses.
- <sup>15</sup> 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 dated 29 April 2019, the Bachelor's degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 20.10.2021 Adjustment in the field responsible lecturer.
- <sup>16</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 20.10.2021 Adjustment in the field Usability.
- <sup>17</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 20.10.2021 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 Process Engineering and Natural Materials Technology dated 29 April 2019 or the Bachelor's degree programme in Process Engineering and Natural Materials Technology dated 28 April 2019 in accordance with the resolution of the Faculty Council dated 20.04.2022 Adjustment in the field Usability.
- <sup>19</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 20.04.2022 Adjustment in the field responsible lecturer.
- <sup>20</sup> 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 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology of 15 February 2020 in accordance with the resolution of the Faculty Council of 20.07.2022 Replacement of the teaching offer.

- <sup>21</sup> Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17 May 2019 or Bachelor's degree programme in Mechanical Engineering dated 17 May 2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17 January 2020 in accordance with the resolution of the Faculty Council dated 20.07.2022 Adjustment in the field Usability.
- <sup>22</sup> 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 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology of 15 February 2020 in accordance with the resolution of the Faculty Council of 19.10.2022 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 dated 29 April 2019, the Bachelor's degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 19.10.2021 Adjustment in the field Usability.
- <sup>24</sup> 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 dated 29 April 2019 or Bachelor's degree programme in Process Engineering and Natural Materials Technology dated 28 April 2019 in accordance with the resolution of the Faculty Council dated 19.10.2022 Adjustment in the field responsible lecturer.
- <sup>25</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 19.10.2022 addition to the teaching offer.
- <sup>26</sup> Correction of the assigned courses, 19.10.2022.
- <sup>27</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 19.10.2022 termination 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 dated 29 April 2019 or Bachelor's degree programme in Process Engineering and Natural Materials Technology dated 28 April 2019 in accordance with the resolution of the Faculty Council dated 19.04.2023 Adjustment in the field responsible lecturer.
- <sup>29</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 17.05.2023 Specify in the field requirements for the award of credit points according to the requirements of the accreditation process.
- <sup>30</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 18.10.2023 No offer in WiSe 2023/2024.
- <sup>31</sup> 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 dated 29 April 2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology dated 15 February 2020 in accordance with the resolution of the Faculty Council dated 15.11.2023 Specify in the field requirements for the award of credit points according to the requirements of the accreditation process.
- <sup>32</sup> Extension according to § 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 April 2019 according to the decision of the Faculty Council of 15.11.2023 Adjustment in the field Usability.
- <sup>33</sup> Adjustment of the semester-based SWS allocation and the assigned course in winter semester 2024/2025 and winter semester 2025/2026, 17.04.2024.
- <sup>34</sup> Adjustment of the assigned course, 17.04.2024.
- <sup>35</sup> 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 dated 29 April 2019 or Bachelor's degree programme in Process Engineering and Natural Materials Technology dated 28 April 2019 in accordance with the resolution of the Faculty Council dated 17.04.2024 Adjustment in the field responsible lecturer.