

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

Status: 18:04.2024

Content:

Mandatory area

Compulsory elective area

Assignment of the modules of the profile recommendations in detail (semester 5 and 6)

- Profile recommendation Process Engineering
- Profile recommendation Bioprocess Engineering
- Profile recommendation Chemical Engineering
- Profile recommendation Wood and Fibre Material Technology
- Profile recommendation Food Engineering

Annex

Footnotes

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

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
Mandatory area								
MW-VNT-01 ^{18, 23}	Fundamentals of Mathematics	4/2/0/1 PL						6
MW-VNT-02 ¹⁸	Engineering Mechanics	2/2/0/1 PL (5)	2/2/0/1 PL (4)					9
MW-VNT-03 ²¹	Fundamentals of Chemistry - Inorganic Chemistry - Organic Chemistry	2/1/0/1 PL (4) 2/1/0/1	2/1/0/1 PL (4) 2/1/0/1					8
MW-VNT-04	Business Administration and Language Skills - Language Competence - Business Administration	2 SWS SK PL (2) 2 SWS SK	2/1/0/1 PL (3) 2/1/0/1					5
MW-VNT-05	Physics	2/1/2/1 2xPL						5
MW-VNT-06 ^{15, 18, 24}	Computer Science - Computer Application in Mechanical Engineering - Software and Programming Technology	2/2/0/0 PL (4) 2/2/0/0	2/1/1/0 2xPL (4) 2/1/1/0					8

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-07 ^{12, 15, 18, 23}	Design Theory	2/2/0/1 (4)	2/2/0/1 PL (4)					8
MW-VNT-08 ^{1, 23, 32}	Fundamentals of Material Science		2/0/1/1 (3)	2/0/1/1 2xPL (3)				6
MW-VNT-09 ^{1, 10, 11, 12, 23}	Engineering Mathematics		4/2/0/1 PL					6
MW-VNT-10	Fundamentals of Kinematics and Kinetics			2/2/0/1 PL				5
MW-VNT-11 ¹⁵	Fundamentals of Electrical Engineering			2/2/2/1 2xPL				7
MW-VNT-12 ^{1, 6, 12, 32}	Engineering Thermodynamics/Heat Transfer - Technical Thermodynamics - Heat Transfer			2/2/0/1 PL (5) 2/2/0/1	2/2/0/1 PL (4) 2/2/0/1			9
MW-VNT-13 ^{1, 10, 23}	Special Topics of Mathematics			2/2/0/1 (4)	2/2/0/1 PL (5)			9
MW-VNT-14 ²¹	Physical Chemistry and Biochemistry - Physical Chemistry - Biochemistry			2/1/0/1 PL (3) 2/1/0/1	2/0/0/1 PL (3) 2/0/0/1			6

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-15	Processing Machines and Apparatus Technology - Apparatus Technology - Processing Machines - Production and Logistics				5/2/0/1 2xPL 2/1/0/0 2/1/0/1 1/0/0/0			8
MW-VNT-16 ⁶	Introduction to Process Engineering and Natural Materials Technology			4/2/0/0 PL (5)	4/0/0/1 PL (5)			10
MW-VNT-17 ^{23, 32}	Fundamentals of Fluid Mechanics				2/2/0/1 PL			5
MW-VNT-18	General and Engineering-Specific Qualifications in Process Engineering and Natural Materials Technology					#/#/#/# PL ¹⁾ (3)	#/#/#/# PL ¹⁾ (2)	5
MW-VNT-19 ^{1, 12, 23}	Measurement and Automation Engineering					2/1/1/0 PL (4)	2/1/1/0 2xPL (4)	8
Compulsory elective area								
Profile recommendation Process Engineering ²⁾								
MW-VNT-23 ¹	Fundamentals of Mechanical and Thermal Process Engineering - Basic Processes of Mechanical Process Engineering - Basic Processes of Thermal Process Engineering					4/2/0/0 PL 2/1/0/0 2/1/0/0		7

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-24 ^{6, 28}	Fundamentals of Chemical Process Engineering - Fundamentals of Reaction Engineering - Process Engineering Internship					2/2/1/0 2xPL 2/2/0/0 0/0/1/0		5
MW-VNT-25 ^{1, 6, 28, 35}	Plant Engineering and Safety Engineering - Plant Engineering - Security Technology					4/0/0 PL 2/0/0/0 2/0/0/0		5
MW-VNT-26	Heat Transfer and Mass Transfer - Heat Transfer and Mass Transfer					2/2/0/0 PL 2/2/0/0		5
MW-VNT-27	Fluid Mechanics for Mechanical Process Engineering - Flow Problems in Mechanical Process Engineering						2/2/0/0 PL 2/2/0/0	5
MW-VNT-28 ¹⁵	Consolidation and Application of Thermal Process Engineering - Thermal Process Engineering - Environmental Technology						4/1/0/0 PL 2/1/0/0 2/0/0/0	5
MW-VNT-30 ^{6, 28}	Multiphase Reactions - Multiphase Reactions - Process Engineering Internship						2/1/1/0 2xPL 2/1/0/0 0/0/1/0	5

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
Profile recommendation Bioprocess Engineering ²⁾								
MW-VNT-46 ^{1, 23}	General Microbiology - General microbiology					2/0/2/0 2xPL 2/0/2/0		5
MW-VNT-47 ¹⁵	Fundamental Processes of Thermal Process Engineering - Basic Processes of Thermal Process Engineering - Process Engineering Internship					2/1/1/0 2xPL 2/1/0/0 0/0/1/0		5
MW-VNT-48	Biophysics and Bioprocess Engineering Working Methods - Biophysics - Biotechnical working Methods					3/0/0 PL 1/0/0/0 2/0/0/0		5
MW-VNT-49 ^{1, 3, 6, 23}	Fundamentals of Bioprocess Engineering - Fundamentals of Bioprocess Engineering						2/3/3/0 2xPL 2/3/3/0	10
MW-VNT-50 ^{2, 3, 6, 23}	Biochemistry for Bioprocess Engineers - Biochemistry for Biochemical Engineers					2/0/4/0 2xPL 2/0/4/0		7

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-53	Mechanical Process Engineering and Process Analysis - Mechanical Reconditioning Processes - Process Analysis and Design of Experiments						3/2/0/0 PL 2/1/0/0 1/1/0/0	5
Profile recommendation Chemical Engineering ²⁾								
MW-VNT-23¹	Fundamentals of Mechanical and Thermal Process Engineering - Basic Processes of Mechanical Process Engineering - Basic processes of Thermal Process Engineering					4/2/0/0 PL 2/1/0/0 2/1/0/0		7
MW-VNT-24^{6, 28}	Fundamentals of Chemical Process Engineering - Fundamentals of Reaction Engineering - Process Engineering Internship					2/2/1/0 2xPL 2/2/0/0 0/0/1/0		5
MW-VNT-30^{6, 28}	Multiphase Reactions - Multiphase reactions - Process engineering internship						2/1/1/0 2xPL 2/1/0/0 0/0/1/0	5
MW-VNT-63	Analytical Chemistry - Analytical Chemistry - Practical Course General Chemistry					2/0/2/0 2xPL 2/0/0/0 0/0/2/0		5

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-64 ^{21, 33}	Industrial Chemistry - Technical Chemistry					2/1/0/0 PL 2/1/0/0		5
MW-VNT-64 ^{21, 33}	Industrial Chemistry - Sustainable aspects of industrial and circular chemistry					2/0/0/0 PL 2/0/0/0		5
MW-VNT-65	Fundamental Chemical Analysis - Practical Course Analytical Chemistry - Practical Course Organic Chemistry/Biochemistry						0/1/4/0 2xPL 0/1/1/0 0/0/3/0	5
MW-VNT-66	Chemical Processes and Material Separation Operations - Chemical Processes and Substance Separation Operations						0/0/3/0 2xPL 0/0/3/0	5
Profile recommendation Wood and Fibre Material Technology ²⁾								
MW-VNT-47 ¹⁵	Fundamental Processes of Thermal Process Engineering - Basic Processes of Thermal Process Engineering - Process Engineering Internship					2/1/1/0 2xPL 2/1/0/0 0/0/1/0		5
MW-VNT-53	Mechanical Process Engineering and Process Analysis - Mechanical Reconditioning Processes - Process Analysis and Design of Experiments						3/2/0/0 PL 2/1/0/0 1/1/0/0	5

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-74	Chemical Fundamentals of Wood and Fibre Materials Technology - Chemical Basics of Wood Technology and Fibre Materials Technology					2/2/0/0 2xPL 2/2/0/0		5
MW-VNT-75²	Fundamentals of Wood Anatomy - Basics of Wood Anatomy					3/1/1/0 2xPL 3/1/1/0		5
MW-VNT-76^{1,2}	Basic Processes of Manufacturing and Processing of Wood-based Materials and Paper - Basic Processes of Manufacturing and Processing of Wood-based Materials and Paper					8/0/0 PL 8/0/0/0		10
MW-VNT-77	Physical Fundamentals of Wood Technology and Paper Technology - Physical Fundamentals of Wood Technology and Paper Technology						3/1/1/0 2xPL 3/1/1/0	7
Profile recommendation Food Engineering²⁾								
MW-VNT-47¹⁵	Fundamental Processes of Thermal Process Engineering - Basic Processes of Thermal Process Engineering - Process Engineering Internship					2/1/1/0 2xPL 2/1/0/0 0/0/1/0		5

Module no.	Module name	1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	5 th Semester (M)	6 th Semester	LP
		V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	V/Ü/P/T	
MW-VNT-99 ⁶	Fundamentals of Food Engineering - Introduction Food Technology - Introduction Food Technology					4/0/0 PL 2/0/0/0 2/0/0/0		5
MW-VNT-100 ⁶	Food Science - Food Science 1 - General Microbiology					4/0/0 2xPL 2/0/0/0 2/0/0/0		5
MW-VNT-101	Fundamentals of Food Chemistry - Fundamentals of Food Chemistry					4/1/3/0 2xPL 4/1/3/0		10
MW-VNT-102 ⁶	Generic Food Technology - General Food Technology						3/0/0 PL 3/0/0/0	5
MW-VNT-104 ^{2,6}	Food Microbiology and Hygiene - Food Science 2 - Food Microbiology						4/0/2/0 2xPL 2/0/0/0 2/0/2/0	7
Bachelor thesis							9	9
Colloquium							1	1
Credit points		30	28	32	30	29 or 32 ³⁾	28 or 31 ³⁾	180

Annex

V	Lecture
Ü	Exercise
P	Practical course
SK	Language course
T	Tutorial
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 3 Study Regulations
SWS	Lecture hours per week

1) 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.

2) Alternatively, at the student's choice, one of five profile recommendations.

3) Alternatively, according to the choice of profile recommendation.

¹ 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 Applicability.

² 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.

³ 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.

⁶ 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 and the 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 March 2021 Adjustment in the field Applicability.

¹⁰ Extension according to § 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 according to the resolution of the Faculty Council of 15.04.2020 Adjustment in the field Applicability.

¹¹ Extension according to § 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 Applicability.

- 12 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 Applicability.
- 15 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 28 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 responsible lecturer.
- 18 Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the Diploma-postgraduate 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 Applicability.
- 21 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 15.06.2022 Adjustment in the field Applicability.
- 23 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 28 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 19.10.2021 Adjustment in the field Usability.
- 24 Extension in accordance with § 6, Para. 6 and § 10, Para. 2 Study Regulations for the Diploma degree programme in 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.
- 28 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.
- 32 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.
- 33 Adjustment of the semester-based SWS allocation and the assigned course in winter semester 2024/2025 and winter semester 2025/2026, 17.04.2024.
- 35 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.