

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

Status: 19.04.2023

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-01 ^{16, 22}	Fundamentals of Mathematics	4/2/0/1 PL						6
MW-02	General and Inorganic Chemistry	4/1/1 2xPL						7
MW-03	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-04 ¹⁰	Physics	2/1/0/1 (3)	2/1/2/1 2xPL (5)					8
MW-05 ¹⁶	Engineering Mechanics	2/2/0/1 PL (5)	2/2/0/1 PL (4)					9
MW-12 ^{1, 16, 22}	Fundamentals of Materials Science	4/1/1/0 PL (7)	4/1/1/0 2xPL (8)					15
MW-06 ^{1, 10, 11, 12, 22}	Engineering Mathematics		4/2/0/1 PL					6
MW-07	Organic and Physical Chemistry - Organic Chemistry - Physical Chemistry		2/1/0/1 PL (4) 2/1/0/1	2/1/0/1 PL (3) 2/1/0/1				7

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		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-WW-08	Fundamentals of Electrical Engineering			2/2/0/1 PL				5
MW-WW-09 1, 11, 22	Special Topics of Mathematics			2/2/0/1 (4)	2/2/0/1 PL (5)			9
MW-WW-10 12, 13, 16, 22	Design Theory			2/2/0/1 (4)	2/2/0/1 PL (4)			8
MW-WW-11 13, 16, 22	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
MW-WW-13 2, 8, 16	Materials Production and Manufacturing Technology - Production Engineering - Material Production			2/1/0/0 1 day E, PL (4) 2/1/0/0	2/0/0 PL (3) 2/0/0/0			7
MW-WW-14 1, 2	Materials Testing and Materials Diagnostics - Materials Testing - Materials Diagnostics			2/0/1/0 PL (3) 2/0/1/0	2/0/1/0 2xPL (3) 2/0/1/0			6
MW-WW-15 1, 16	Metallic Materials - Heat Treatment and Metallic Materials 1 - Metallic Materials 2			4/0/1/1 PL (5) 4/0/1/1	3/0/0/1 PL (4) 3/0/0/1			9
MW-WW-16 ¹	Advanced Ceramic Materials				2/0/1/1 2xPL			5

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		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- WW-17 ^{16, 22}	Polymers and Biomaterials - Polymers - Biomaterials					3/0/1/0 2xPL (5) 3/0/1/0	2/0/0 PL (4) 2/0/0/0	9
MW- WW-20 ^{2, 17, 26}	Powder Metallurgy and Sintered Materials					3/0/0/0 (4)	2/0/1/0 2xPL (4)	8
MW- WW-21 ^{1, 7, 16, 17, 22}	Materials Physics and Materials Chemistry					3/1/0/0 (5)	3/1/0/0 PL (5)	10
MW- WW-24	General and Engineering-Specific Qualifications in Materials Science					#/#/#/# PL ¹⁾ (2)	#/#/#/# PL ¹⁾ (3)	5
MW- WW-28 ⁴	Advanced Course Materials Science					4/0/0 PL ²⁾ (5)	2/0/0 PL ²⁾ (3)	8
Compulsory elective area								
Selection of modules amounting to 10 LP								
MW- WW-18	Computer Simulation in Materials Science					2/0/1/0 PL		5
MW- WW-19	Metallography					2/0/1/0 2xPL		5
MW- WW-26	Corrosion and Corrosion Protection					2/0/1/0 2xPL		5

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		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-WW-GM10	Characterisation of Soft Materials					2/2/0/0 2xPL		5
MW-WW-AW06	Dental Materials					2/2/0/0 2xPL		5
Bachelor thesis							9	9
Colloquium							1	1
Credit points		30	30	31	29	31	29	180

Annex

M	Mobility window according to § 6 Paragraph 1 Sentence 3 Study Regulations
V	Lecture
Ü	Exercise
P	Practical course
SK	Language course
T	Tutorial
E	Excursion
PL	Examination performance(s)
LP	Credit points - in brackets () pro rata allocation to individual semesters according to workload
SWS	Lecture hours per week

- 1) Alternatively, at the student's choice, courses with a total volume of 4 SWS including the examination performances specified according to the catalogue General and Engineering-Specific Qualifications Materials Science.
- 2) The number of required examinations can be found in the catalogue of the advanced module in materials science of the bachelor's degree programme in materials science according to the module description.

- 1 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.
- 2 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 Responsible lecturer.
- 4 Extension in accordance with § 6 Para. 6 and § 10 Para. 2 Study Regulations for the 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 Responsible lecturer.
- 7 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 17.03.2021 Adjustment in the field Responsible lecturer.
- 8 Correction of the semester-based SWS distribution.
- 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 21.04.2021 Adjustment in the field Applicability.
- 11 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 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.
- 13 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Materials Science dated 29 April 2019 or Bachelor's degree Programme in Materials Science dated 28 April 2019 in accordance with the resolution of the Faculty Council dated 20.10.2021 Adjustment in the field Responsible lecturer.
- 16 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 April 2019 in accordance with the resolution of the Faculty Council of 20.04.2022 Adjustment in the field Applicability.
- 17 Correction of SWS distribution and merging of courses.
- 22 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 April 2019 in accordance with the resolution of the Faculty Council of 19.10.2022 Adjustment in the field Applicability.

- 25 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 19.10.2022 Adjustment in the field Responsible lecturer.
- 26 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Materials Science dated 29 April 2019 or Bachelor's degree Programme in Materials Science dated 28 April 2019 in accordance with the resolution of the Faculty Council dated 19.04.2023 Adjustment in the field Responsible lecturer.