

Exclosure to Subject Specific Regulations
 from 25.07.2018
 for Master-Programme Bauingenieurwesen
 at TUHH
 Programme Director: Prof. Frank Schmidt-
 Döhl
 Total: 120 CP
 Number of Specialisations to choose: 1

TUHH

Course Scheme Master Civil Engineering (BAUMS)

Consolidated Version
 for Study Cohort: WiSe24/25
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 and Approval of Chair from:
 07.05.2025
 Replaces Version from: 17.04.2024
 In Force on: 01.10.2025
 Out of Force on: 30.09.2027

Information regarding the lectures are available in the TUHH modul manuals as well as in the course catalogue.

Re-com. Term	Module						Examination			Course Work		
	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
Core Qualification Compulsory Courses: 24 LP Optional Courses: 0 LP												
1	Finite Elemente / Finite elements	DE	Prof. Oesterle	B-4	C	CM	6	Y	KL			
1	Nachhaltige Kreislaufwirtschaft / Sustainable Circular Economy	EN	Prof. Kuchta	V-11	C	CM	6	Y	SA			
1-3	Nichttechnische Angebote im Master / Non-technical Courses for Master	DE / EN	Richter	0-TUHH	C	OM	6	Selection out of seperatly published Catalogue				
1-3	Betrieb & Management / Business & Management	DE / EN	Prof. Meyer	W-1	C	OM	6	Selection out of seperatly published Catalogue				
Specialisation Coastal Engineering Compulsory Courses: 42 LP Optional Courses: 24 LP												
1	Geotechnik III / Geotechnics III	DE	Prof. Grabe	B-5	C	CM	6	Y	KL			
1	Unterirdisches Bauen / Underground Constructions	DE	Prof. Grabe	B-5	C	CM	6	Y	KL	N	ÜA	5
1	Baurobotik / Construction Robotics	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
2	Hafenbau und Hafenplanung / Harbour Engineering and Harbour Planning	DE	Prof. Fröhle	B-10	C	CM	6	Y	KL			
2	Küstenwasserbau I / Coastal Hydraulic Engineering I	EN	Prof. Fröhle	B-10	C	CM	6	Y	KL			
2	Marine Geotechnik / Marine Geotechnics	DE	Prof. Grabe	B-5	C	CM	6	Y	KL			
2	Abwassersysteme / Wastewater Systems	DE / EN	Dr. Behrendt	B-2	EC	CM	6	Y	KL			
2	Baulegistik und Projektmanagement / Construction Logistics and Project Management	DE	Prof. Flämig	W-8	EC	CM	6	Y	SA			
2	Baustatik und Baudynamik / Statics and Dynamics of Structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Baustoffe und Bauwerkserhaltung / Building Materials and Building Preservation	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL	Y	FFST	20
2	Bodenmechanik und -dynamik / Soil Mechanics and -Dynamics	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	Y	FFST	0

		Module					Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (%)
2	Digital Twinning im Bauingenieurwesen / Digital Twinning in Civil Engineering	DE	Chmelnizkij	B-1	EC	CM	6	Y	RE			
2	Flächentragwerke / Thin-walled structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Hafenlogistik / Port Logistics	DE	Prof. Jahn	W-12	EC	CM	6	Y	KL	N	SA	15
2	Maritimer Transport / Maritime Transport	DE	Prof. Jahn	W-12	EC	CM	6	Y	KL	N	FFST	15
2	Modellieren im Wasserbau / Modelling of Hydraulic Engineering	DE / EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Modellierung in der Wasserwirtschaft / Modeling in Water Management	DE / EN	Dr. Johannsen	B-11	EC	CM	6	Y	MP			
2	Nachhaltige elektrische Energie aus Wind und Wasser / Sustainable energy from wind and water	DE	Dr. Scherzinger	V-9	EC	CM	6	Y	KL			
2	Projekt des Stahlbaus / Steel Construction Project	DE	Prof. Rutner	B-8	EC	CM	6	Y	SA			
2	Smart Monitoring / Smart Monitoring	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
2	Spannbeton- und Massivbrückenbau / Design of Prestressed Structures and Concrete Bridges	DE	NN	B-7	EC	CM	6	Y	KL			
2	Städtisches Umweltmanagement / Urban Environmental Management	EN	Dr. Rechtenbach	B-2	EC	CM	6	Y	SA			
2	Stadtplanung / City Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA			
2	Water and Environment: Theory and Application / Water and Environment: Theory and Application	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA			
3	Küstenwasserbau II / Coastal Hydraulic Engineering II	EN	Prof. Fröhle	B-10	C	CM	6	Y	KL			
3	Studienarbeit Hafenbau und Küstenschutz / Study Work Harbour and Coastal Engineering		Prof. Fröhle	B-10	C	CM	6	Y	STA			
3	Anpassung an den Klimawandel in der wasserbaulichen Praxis (AKWAS) / Adaptation to Climate Change in Hydraulic Engineering (AKWAS)	DE	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Bau- und Tiefbaurecht / Building and Excavation Law	DE	Prof. Grabe	B-5	EC	CM	6	Y	MP			
3	Betontragwerke / Concrete Structures	DE	Dr. Faron	B-7	EC	CM	6	Y	KL	N	RE	0
3	Biologische Abfallbehandlung / Biological Waste Treatment	EN	Prof. Kuchta	V-11	EC	CM	6	Y	RE	Y	FFST	0
3	Finite-Elemente-Modellierung von Tragwerken / Finite element modeling of structures	EN	Prof. Oesterle	B-4	EC	CM	6	Y	SA			
3	Gewässerschutz / Water Protection	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20
3	Integrierte Verkehrsplanung / Integrated Transportation Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA			
3	Introduction to Climate Informed Engineering / Introduction to Climate Informed Engineering	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA			

Module							Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
3	Materialprüfung, Bauzustands- und Schadensanalyse / Examination of Materials, Structural Condition and Damages	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL			
3	Moderne Diskretisierungsmethoden in der Strukturmechanik / Modern discretization methods in structural mechanics	EN	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
3	Nachhaltiger naturbasierter Küstenschutz im Klimawandel (SeaPiaC) / Sustainable Nature-based Coastal Protection in a Changing Climate (SeaPiaC)	EN	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Scientific Working in Computational Engineering / Scientific Working in Computational Engineering	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
3	Stahl- und Verbundtragwerke / Steel and Composite Structures	DE	Prof. Rutner	B-8	EC	CM	6	Y	KL			
3	Subsurface Processes / Subsurface Processes	EN	Dr. Aminzadeh	B-9	EC	CM	6	Y	FFA			
3	Wasserressourcen und -versorgung / Water Resources and -Supply	DE	Prof. Ernst	B-11	EC	CM	6	Y	KL			
3-4	Ausgewählte Themen des Bauingenieurwesens / Selected Topics in Civil Engineering	DE / EN	Prof. Schmidt-Döhl	B-3	EC	OM	6	Selection out of Catalogue below				
4	Modellierung von Unsicherheit für Ingenieure / Uncertainty Modelling for Engineers	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20

Specialisation Computational Engineering Compulsory Courses: 42 LP Optional Courses: 24 LP

1	Geotechnik III / Geotechnics III	DE	Prof. Grabe	B-5	C	CM	6	Y	KL			
1	Baurobotik / Construction Robotics	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
1	Betontragwerke / Concrete Structures	DE	NN	B-7	EC	CM	6	Y	KL	N	RE	0
1	Stahl- und Verbundtragwerke / Steel and Composite Structures	DE	Prof. Rutner	B-8	EC	CM	6	Y	KL			
1	Subsurface Processes / Subsurface Processes	EN	Prof. Shokri	B-9	EC	CM	6	Y	FFA			
2	Digital Twinning im Bauingenieurwesen / Digital Twinning in Civil Engineering	DE	Chmelnizkij	B-1	C	CM	6	Y	RE			
2	Flächentragwerke / Thin-walled structures	DE	Prof. Oesterle	B-4	C	CM	6	Y	KL			
2	Modellieren im Wasserbau / Modelling of Hydraulic Engineering	DE / EN	Prof. Fröhle	B-10	C	CM	6	Y	KL			
2	Advanced Vadose Zone Hydrology / Advanced Vadose Zone Hydrology	EN	Prof. Shokri	B-9	EC	CM	6	Y	SA			
2	Baustatik und Baudynamik / Statics and Dynamics of Structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Bodenmechanik und -dynamik / Soil Mechanics and -Dynamics	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	Y	FFST	0

		Module					Examination				Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)	
2	High-Order FEM / High-Order FEM	EN	Prof. Düster	M-10	EC	CM	6	Y	KL	N	RE	10	
2	Hydrologische Systeme / Hydrological Systems	DE / EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL				
2	Marine Geotechnik / Marine Geotechnics	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL				
2	Mathematik IV / Mathematics IV	DE	Prof. Lindner	0-UNIHH-M	EC	CM	6	Y	KL				
2	Modellierung in der Wasserwirtschaft / Modeling in Water Management	DE / EN	Dr. Johannsen	B-11	EC	CM	6	Y	MP				
2	Numerische Algorithmen in der Strukturmechanik / Numerical Algorithms in Structural Mechanics	EN	Prof. Düster	M-10	EC	CM	6	Y	KL				
2	Numerische Strukturdynamik / Computational Structural Dynamics	EN	Prof. Düster	M-10	EC	CM	6	Y	KL				
2	Projekt des Stahlbaus / Steel Construction Project	DE	Prof. Rutner	B-8	EC	CM	6	Y	SA				
2	Spannbeton- und Massivbrückenbau / Design of Prestressed Structures and Concrete Bridges	DE	NN	B-7	EC	CM	6	Y	KL				
3	Finite-Elemente-Modellierung von Tragwerken / Finite element modeling of structures	EN	Prof. Oesterle	B-4	C	CM	6	Y	SA				
3	Nichtlineare Strukturanalyse / Nonlinear Structural Analysis	EN	Prof. Düster	M-10	C	CM	6	Y	KL				
3	Studienarbeit Modellierung und Simulation / Study work computational engineering		Dozenten des SD B	SD-B	C	CM	6	Y	STA				
3	Bau- und Tiefbaurecht / Building and Excavation Law	DE	Prof. Grabe	B-5	EC	CM	6	Y	MP				
3	Introduction to Climate Informed Engineering / Introduction to Climate Informed Engineering	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA				
3	Moderne Diskretisierungsmethoden in der Strukturmechanik / Modern discretization methods in structural mechanics	EN	Prof. Oesterle	B-4	EC	CM	6	Y	KL				
3	Scientific Working in Computational Engineering / Scientific Working in Computational Engineering	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA				
3	Unterirdisches Bauen / Underground Constructions	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	N	ÜA	5	
3-4	Ausgewählte Themen des Bauingenieurwesens / Selected Topics in Civil Engineering	DE / EN	Prof. Schmidt-Döhl	B-3	EC	OM	6	Selection out of Catalogue below					
4	Modellierung von Unsicherheit für Ingenieure / Uncertainty Modelling for Engineers	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20	

Specialisation Geotechnical Engineering Compulsory Courses: 42 LP Optional Courses: 24 LP

1	Geotechnik III / Geotechnics III	DE	Prof. Grabe	B-5	C	CM	6	Y	KL			
1	Unterirdisches Bauen / Underground Constructions	DE	Prof. Grabe	B-5	C	CM	6	Y	KL	N	ÜA	5
1	Baurobotik / Construction Robotics	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			

		Module					Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
2	Baustoffe und Bauwerkserhaltung / Building Materials and Building Preservation	DE	Prof. Schmidt-Döhl	B-3	C	CM	6	Y	KL	Y	FFST	20
2	Bodenmechanik und -dynamik / Soil Mechanics and -Dynamics	DE	Prof. Grabe	B-5	C	CM	6	Y	KL	Y	FFST	0
2	Küstenwasserbau I / Coastal Hydraulic Engineering I	EN	Prof. Fröhle	B-10	C	CM	6	Y	KL			
2	Marine Geotechnik / Marine Geotechnics	DE	Prof. Grabe	B-5	C	CM	6	Y	KL			
2	Abwassersysteme / Wastewater Systems	DE / EN	Dr. Behrendt	B-2	EC	CM	6	Y	KL			
2	Baulogistik und Projektmanagement / Construction Logistics and Project Management	DE	Prof. Flämig	W-8	EC	CM	6	Y	SA			
2	Baustatik und Baudynamik / Statics and Dynamics of Structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Digital Twinning im Bauingenieurwesen / Digital Twinning in Civil Engineering	DE	Chmelnizkij	B-1	EC	CM	6	Y	RE			
2	Flächentragwerke / Thin-walled structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Hafenbau und Hafenplanung / Harbour Engineering and Harbour Planning	DE	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Modellieren im Wasserbau / Modelling of Hydraulic Engineering	DE / EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Modellierung in der Wasserwirtschaft / Modeling in Water Management	DE / EN	Dr. Johannsen	B-11	EC	CM	6	Y	MP			
2	Nachhaltige elektrische Energie aus Wind und Wasser / Sustainable energy from wind and water	DE	Dr. Scherzinger	V-9	EC	CM	6	Y	KL			
2	Projekt des Stahlbaus / Steel Construction Project	DE	Prof. Rutner	B-8	EC	CM	6	Y	SA			
2	Smart Monitoring / Smart Monitoring	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
2	Spannbeton- und Massivbrückenbau / Design of Prestressed Structures and Concrete Bridges	DE	NN	B-7	EC	CM	6	Y	KL			
2	Städtisches Umweltmanagement / Urban Environmental Management	EN	Dr. Rechtenbach	B-2	EC	CM	6	Y	SA			
2	Stadtplanung / City Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA			
3	Studienarbeit Tiefbau / Study Work Foundation Engineering		Dozenten des SD B	B-5	C	CM	6	Y	STA			
3	Anpassung an den Klimawandel in der wasserbaulichen Praxis (AKWAS) / Adaptation to Climate Change in Hydraulic Engineering (AKWAS)	DE	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Bau- und Tiefbaurecht / Building and Excavation Law	DE	Prof. Grabe	B-5	EC	CM	6	Y	MP			
3	Betontragwerke / Concrete Structures	DE	Dr. Faron	B-7	EC	CM	6	Y	KL	N	RE	0
3	Biologische Abfallbehandlung / Biological Waste Treatment	EN	Prof. Kuchta	V-11	EC	CM	6	Y	RE	Y	FFST	0

		Module					Examination				Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)	
3	Finite-Elemente-Modellierung von Tragwerken / Finite element modeling of structures	EN	Prof. Oesterle	B-4	EC	CM	6	Y	SA				
3	Gewässerschutz / Water Protection	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20	
3	Integrierte Verkehrsplanung / Integrated Transportation Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA				
3	Introduction to Climate Informed Engineering / Introduction to Climate Informed Engineering	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA				
3	Küstenwasserbau II / Coastal Hydraulic Engineering II	EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL				
3	Materialprüfung, Bauzustands- und Schadensanalyse / Examination of Materials, Structural Condition and Damages	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL				
3	Moderne Diskretisierungsmethoden in der Strukturmechanik / Modern discretization methods in structural mechanics	EN	Prof. Oesterle	B-4	EC	CM	6	Y	KL				
3	Nachhaltiger naturbasierter Küstenschutz im Klimawandel (SeaPiaC) / Sustainable Nature-based Coastal Protection in a Changing Climate (SeaPiaC)	EN	Prof. Fröhle	B-10	EC	CM	6	Y	SA				
3	Scientific Working in Computational Engineering / Scientific Working in Computational Engineering	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA				
3	Stahl- und Verbundtragwerke / Steel and Composite Structures	DE	Prof. Rutner	B-8	EC	CM	6	Y	KL				
3	Subsurface Processes / Subsurface Processes	EN	Dr. Aminzadeh	B-9	EC	CM	6	Y	FFA				
3	Wasserressourcen und -versorgung / Water Resources and - Supply	DE	Prof. Ernst	B-11	EC	CM	6	Y	KL				
3-4	Ausgewählte Themen des Bauingenieurwesens / Selected Topics in Civil Engineering	DE / EN	Prof. Schmidt-Döhl	B-3	EC	OM	6	Selection out of Catalogue below					
4	Modellierung von Unsicherheit für Ingenieure / Uncertainty Modelling for Engineers	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20	
Specialisation Structural Engineering Compulsory Courses: 42 LP Optional Courses: 24 LP													
1	Betontragwerke / Concrete Structures	DE	NN	B-7	C	CM	6	Y	KL	N	RE	0	
1	Geotechnik III / Geotechnics III	DE	Prof. Grabe	B-5	C	CM	6	Y	KL				
1	Stahl- und Verbundtragwerke / Steel and Composite Structures	DE	Prof. Rutner	B-8	C	CM	6	Y	KL				
1	Baurobotik / Construction Robotics	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA				
2	Baustatik und Baudynamik / Statics and Dynamics of Structures	DE	Prof. Oesterle	B-4	C	CM	6	Y	KL				
2	Projekt des Stahlbaus / Steel Construction Project	DE	Prof. Rutner	B-8	C	CM	6	Y	SA				

		Module					Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
2	Spannbeton- und Massivbrückenbau / Design of Prestressed Structures and Concrete Bridges	DE	NN	B-7	C	CM	6	Y	KL			
2	Abwassersysteme / Wastewater Systems	DE / EN	Dr. Behrendt	B-2	EC	CM	6	Y	KL			
2	Baulogistik und Projektmanagement / Construction Logistics and Project Management	DE	Prof. Flämig	W-8	EC	CM	6	Y	SA			
2	Baustoffe und Bauwerkserhaltung / Building Materials and Building Preservation	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL	Y	FFST	20
2	Bodenmechanik und -dynamik / Soil Mechanics and -Dynamics	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	Y	FFST	0
2	Digital Twinning im Bauingenieurwesen / Digital Twinning in Civil Engineering	DE	Chmelniczki	B-1	EC	CM	6	Y	RE			
2	Flächentragwerke / Thin-walled structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Hafenbau und Hafenplanung / Harbour Engineering and Harbour Planning	DE	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Küstenwasserbau I / Coastal Hydraulic Engineering I	EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Marine Geotechnik / Marine Geotechnics	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL			
2	Modellieren im Wasserbau / Modelling of Hydraulic Engineering	DE / EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Modellierung in der Wasserwirtschaft / Modeling in Water Management	DE / EN	Dr. Johannsen	B-11	EC	CM	6	Y	MP			
2	Nachhaltige elektrische Energie aus Wind und Wasser / Sustainable energy from wind and water	DE	Dr. Scherzinger	V-9	EC	CM	6	Y	KL			
2	Smart Monitoring / Smart Monitoring	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
2	Städtisches Umweltmanagement / Urban Environmental Management	EN	Dr. Rechtenbach	B-2	EC	CM	6	Y	SA			
2	Stadtplanung / City Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA			
3	Studienarbeit Tragwerke / Study Work Structural Engineering		Dozenten des SD B	B-7	C	CM	6	Y	STA			
3	Anpassung an den Klimawandel in der wasserbaulichen Praxis (AKWAS) / Adaptation to Climate Change in Hydraulic Engineering (AKWAS)	DE	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Bau- und Tiefbaurecht / Building and Excavation Law	DE	Prof. Grabe	B-5	EC	CM	6	Y	MP			
3	Biologische Abfallbehandlung / Biological Waste Treatment	EN	Prof. Kuchta	V-11	EC	CM	6	Y	RE	Y	FFST	0
3	Finite-Elemente-Modellierung von Tragwerken / Finite element modeling of structures	EN	Prof. Oesterle	B-4	EC	CM	6	Y	SA			
3	Gewässerschutz / Water Protection	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20
3	Integrierte Verkehrsplanung / Integrated Transportation Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA			

Re-com. Term	Module						Examination			Course Work		
	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)

3	Introduction to Climate Informed Engineering / Introduction to Climate Informed Engineering	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA			
3	Küstenwasserbau II / Coastal Hydraulic Engineering II	EN	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
3	Materialprüfung, Bauzustands- und Schadensanalyse / Examination of Materials, Structural Condition and Damages	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL			
3	Metallische und Hybride Werkstoffe für den Leichtbau / Metallic and Hybrid Light-weight Materials	EN	Prof. Rutner	B-8	EC	CM	6	Y	MP			
3	Moderne Diskretisierungsmethoden in der Strukturmechanik / Modern discretization methods in structural mechanics	EN	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
3	Nachhaltiger naturbasierter Küstenschutz im Klimawandel (SeaPiaC) / Sustainable Nature-based Coastal Protection in a Changing Climate (SeaPiaC)	EN	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Nichtlineare Strukturanalyse / Nonlinear Structural Analysis	EN	Prof. Düster	M-10	EC	CM	6	Y	KL			
3	Scientific Working in Computational Engineering / Scientific Working in Computational Engineering	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
3	Subsurface Processes / Subsurface Processes	EN	Dr. Aminzadeh	B-9	EC	CM	6	Y	FFA			
3	Unterirdisches Bauen / Underground Constructions	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	N	ÜA	5
3	Wasserressourcen und -versorgung / Water Resources and - Supply	DE	Prof. Ernst	B-11	EC	CM	6	Y	KL			
3-4	Ausgewählte Themen des Bauingenieurwesens / Selected Topics in Civil Engineering	DE / EN	Prof. Schmidt-Döhl	B-3	EC	OM	6	Selection out of Catalogue below				
4	Modellierung von Unsicherheit für Ingenieure / Uncertainty Modelling for Engineers	EN	Prof. Papalexioiu	B-2	EC	CM	6	Y	KL	Y	RE	20

Specialisation Water and Traffic Compulsory Courses: 42 LP Optional Courses: 24 LP

1	Integrierte Verkehrsplanung / Integrated Transportation Planning	DE	Prof. Gertz	W-8	C	CM	6	Y	SA			
1	Wasserressourcen und -versorgung / Water Resources and - Supply	DE	Prof. Ernst	B-11	C	CM	6	Y	KL			
1	Baurobotik / Construction Robotics	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
1	Materialprüfung, Bauzustands- und Schadensanalyse / Examination of Materials, Structural Condition and Damages	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL			
1	Umweltmikrobiologie und -analytik / Environmental microbiology and analytics	EN	Dr. Rechtenbach	B-2	EC	CM	6	Y	KL			

		Module					Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
1	Unterirdisches Bauen / Underground Constructions	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	N	ÜA	5
2	Abwassersysteme / Wastewater Systems	DE / EN	Dr. Behrendt	B-2	C	CM	6	Y	KL			
2	Hydrologische Systeme / Hydrological Systems	DE / EN	Prof. Fröhle	B-10	C	CM	6	Y	KL			
2	Management von Oberflächenwasser / Management of Surface Water	DE / EN	Prof. Fröhle	B-10	C	CM	6	Y	KL			
2	Verkehrsmodellierung / Transportation Modelling	DE	Prof. Gertz	W-8	C	CM	6	Y	SA			
2	Abfall- und Rohstoffmanagement / Waste and Resource Management	EN	Prof. Kuchta	V-11	EC	CM	6	Y	RE	Y	SA	20
2	Advanced Vadose Zone Hydrology / Advanced Vadose Zone Hydrology	EN	Prof. Shokri	B-9	EC	CM	6	Y	SA			
2	Baulogistik und Projektmanagement / Construction Logistics and Project Management	DE	Prof. Flämig	W-8	EC	CM	6	Y	SA			
2	Baustatik und Baudynamik / Statics and Dynamics of Structures	DE	Prof. Oesterle	B-4	EC	CM	6	Y	KL			
2	Baustoffe und Bauwerkserhaltung / Building Materials and Building Preservation	DE	Prof. Schmidt-Döhl	B-3	EC	CM	6	Y	KL	Y	FFST	20
2	Hafenbau und Hafenplanung / Harbour Engineering and Harbour Planning	DE	Prof. Fröhle	B-10	EC	CM	6	Y	KL			
2	Modellierung in der Wasserwirtschaft / Modeling in Water Management	DE / EN	Dr. Johannsen	B-11	EC	CM	6	Y	MP			
2	Nexus Engineering - Wasser, Boden, Nahrung und Energie / Nexus Engineering - Water, Soil, Food and Energy	EN	Prof. Otterpohl	B-2	EC	CM	6	Y	FFA			
2	Smart Monitoring / Smart Monitoring	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
2	Städtisches Umweltmanagement / Urban Environmental Management	EN	Dr. Rechtenbach	B-2	EC	CM	6	Y	SA			
2	Stadtplanung / City Planning	DE	Prof. Gertz	W-8	EC	CM	6	Y	SA			
2	Water and Environment: Theory and Application / Water and Environment: Theory and Application	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA			
3	Studienarbeit Wasser und Verkehr / Study work Water and Traffic		Dozenten des SD B	B-2	C	CM	6	Y	STA			
3	Abfallbehandlung und Recycling / Waste Treatment and Recycling	EN	Prof. Kuchta	V-11	EC	CM	6	Y	KL			

		Module					Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
3	Anpassung an den Klimawandel in der wasserbaulichen Praxis (AKWAS) / Adaptation to Climate Change in Hydraulic Engineering (AKWAS)	DE	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Bau- und Tiefbaurecht / Building and Excavation Law	DE	Prof. Grabe	B-5	EC	CM	6	Y	MP			
3	Betontragwerke / Concrete Structures	DE	Dr. Faron	B-7	EC	CM	6	Y	KL	N	RE	0
3	Biologische Abfallbehandlung / Biological Waste Treatment	EN	Prof. Kuchta	V-11	EC	CM	6	Y	RE	Y	FFST	0
3	Emerging Trends in Environmental Engineering / Emerging Trends in Environmental Engineering	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA			
3	Gewässerschutz / Water Protection	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20
3	Introduction to Climate Informed Engineering / Introduction to Climate Informed Engineering	EN	Prof. Shokri	B-9	EC	CM	6	N	FFA			
3	Membran Technologie / Membrane Technology	EN	Prof. Ernst	B-11	EC	CM	6	Y	KL			
3	Modellierung von Prozessen in der Wassertechnologie / Process Modeling in Water Technology	DE / EN	Dr. Johannsen	B-11	EC	CM	6	Y	MP			
3	Nachhaltiger naturbasierter Küstenschutz im Klimawandel (SeaPiaC) / Sustainable Nature-based Coastal Protection in a Changing Climate (SeaPiaC)	EN	Prof. Fröhle	B-10	EC	CM	6	Y	SA			
3	Scientific Working in Computational Engineering / Scientific Working in Computational Engineering	EN	Prof. Smarsly	B-1	EC	CM	6	Y	SA			
3	Spezialtiefbau / Advanced Foundation Engineering	DE	Prof. Grabe	B-5	EC	CM	6	Y	KL	Y	SA	0
3	Stahl- und Verbundtragwerke / Steel and Composite Structures	DE	Prof. Rutner	B-8	EC	CM	6	Y	KL			
3	Subsurface Processes / Subsurface Processes	EN	Dr. Aminzadeh	B-9	EC	CM	6	Y	FFA			
3-4	Ausgewählte Themen des Bauingenieurwesens / Selected Topics in Civil Engineering	DE / EN	Prof. Schmidt-Döhl	B-3	EC	OM	6	Selection out of Catalogue below				
4	Modellierung von Unsicherheit für Ingenieure / Uncertainty Modelling for Engineers	EN	Prof. Papalexiou	B-2	EC	CM	6	Y	KL	Y	RE	20
Thesis Compulsory Courses: 30 LP Optional Courses: 0 LP												
4	Masterarbeit / Master Thesis		Professoren der TUHH	0-TUHH	C	CM	30	Y	AB			

Selected Topics in Civil Engineering

Course					Examination			
Course Name (German / English)	Course Form LV(5)	Language (6)	SWS (7)	Sem. LV	CP (4)	Grade	Examination Form(3)	Additional information
Bemessung von Verbundbrücken / Design of Composite Bridges	IV	DE	2	SoSe	3	N	KL	
Berechnung von Offshore-Tragwerken / Analysis of Offshore Structures	VL	DE/EN	1	SoSe	1	N	MP	
Feststoffverfahrenstechnik für Biomassen / Solid Matter Process Technology for Biomass	VL	DE	2	SoSe	3	Y	KL	
Innovativer Holzbau / Innovative Timber Construction	VL	DE	2	WiSe	4	N	SA	
Konstruktiver Glasbau / Glass Structures	VL	DE	2	WiSe	2	N	MP	
Konstruktiver Glasbau / Glass Structures	HÜ	DE	1	WiSe	1	N	MP	
Nachhaltige Deponietechnik, Planung und Betrieb / Sustainable landfill design and operation	IV	EN	3	SoSe	3	Y	KL	
Spezialthemen des Stahlbaus / Special Topics in Steel Design	IV	DE	2	SoSe	3	N	KL	
Spezielle Themen des Bauingenieurwesens 1LP / Special topics of civil engineering 1CP		DE	1	WiSe/SoSe	1	N	FFA	
Spezielle Themen des Bauingenieurwesens 2LP / Special topics of civil engineering 2 LP		DE	2	WiSe/SoSe	2	N	FFA	
Spezielle Themen des Bauingenieurwesens 3LP / Special topics of civil engineering 3 LP		DE	3	WiSe/SoSe	3	N	FFA	
Tragwerksentwurf / Structural Design	SE	DE/EN	2	SoSe	2	N	MP	

Explanation:

¹C=Compulsory, EC=Elective Compulsory

²CM=Compulsory Defined Module, OM=Optional Defined Module

³KL=Written exam, SA=Written elaboration, FFST=Subject theoretical and practical work, FFA=Subject theoretical and practical work, MP=Oral exam, RE=Presentation, STA=Study work, ÜA=Exercises, AB=Thesis

⁴CP=Credit Points

⁵VL=Lecture, SE=Seminar, GÜ=Recitation Section (small), PBL=Project-/problem-based Learning, PR=Practical Course, PS=Project Seminar, HÜ=Recitation Section (large), IV=Integrated Lecture

⁶DE=German, EN=English, DE/EN=German and English

⁷SWS=Contact hours