Vienna University of Technology

Faculty of Civil and Environmental Engineering
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institute	lecture	title	type	semester hours	ECTS
Mechanics of Materials and Structures	202.019	Engineering biochemoporomechanics	VO	2,0	3,0
	202.024	Engineering biochemoporomechanics	UE	2,0	2,0
	202.051	Advanced Macro- & Micromechanics of Materials	VO	2,5	4,0
	202.052	Advanced Macro- & Micromechanics of Materials	UE	1,0	1,0
	202.054	Computational Material Modelling	VU	2,5	3,0
	202.064	Computational Biomaterials and Biomechanics	VU	2,0	3,0
	202.647	Mathematical Systems Biology	VO	1,0	1,5
	202.649	Multiscale Material Modelling	VO	2,0	3,0
	202.650	Multiscale Material Modelling	UE	2,0	2,0
	202.674	Mechanobiology – Fundamentals and Modeling Concepts	VU	2,0	3,0
Material Technology, Building Physics, and Building Ecology	206.072	Gas metal arc welding*	LU	4,0	4,0
	206.073	Shielded metal arc welding*	LU	4,0	4,0
	206.177	Welding technology*	LU	2,0	2,0
	206.272	Pipeline Engineering*	VO	2,0	3,0
	206.273	Welding and Joining Technology 1*	VO	2,0	3,0
	206.274	Welding and Joining Technology 2*	VO	2,0	3,0
	207.012	Foundations of Building Science *	VU	2,0	3,0
	207.013	Introduction to Digital Twins for Buildings and Cities*	VU	1,0	2,0
	207.014	Advanced Numerical Methods in Building Science 1*	VU	2,0	3,0
	207.017	Advanced Numerical Methods in Building Science 2*	VU	3,0	3,5
	207.029	Research Methods and Scientific Writing in Building and City Science	SE	1,0	3,5
	206.319	Masonry Engineering in New Buildings *	SE	3,0	3,0
	206.321	Glass in construction	VO	2,0	3,0
	206.324	Refurbishment of buildings	VO	2,0	3,0
	206.341	Structural Optimization	VO	2,0	3,0
Structural Engineering	212.465	Advanced Concrete Engineering	VU	4,0	5,0
Geotechnics	203.110	Underground excavation design	SE	1,5	1,5
	220.015	Finite-Difference Models in Geoengineering	VU	2,0	2,5
	220.019	Stability Problems in Rock Engineering	SE	1,5	1,5
	220.027	Numerical Geotechnics	VO	1,5	2,5
	220.028	Constitutive Modelling of Soils	VO	1,5	2,5
	220.030	Geosynthetics	VO	1,5	2,5
Hydraulic Engineering and Water Resources Management	222.052	Selected topics in Hydraulic- and Dam Engineering I	VO	2,0	3,0
	222.139	Soft Computing in Hydraulic and Structural Engineering Theory and Practice	VO	2,0	3,0
	222.539	Engineering Hydrology*	UE	1,0	1,0
	222.563	Fracture Mechanics of Concrete Dams Fracture Mechanics of Concrete Dams	VO	2,0	3,0
	222.570	Engineering Hydrology 2	VU	2,0	2,5
	222.574	Hydraulic 2	VO	2,5	3,5
	222.580	Modelling and simulation methods in water resource systems	VU	3,0	4,0
	222.581	Hydrometry	VU	1,5	2,0
Water Quality, Resources and Waste Management	226.023	Transfer of Environmental Technology to Developing Countries	SE	2,0	2,0
	226.048	Ecology	SE	2,0	2,0
	226.050	Advanced wastewater treatment and reuse	VO	1,5	2,0
	226.052	Freshwater quality and ecology	VO	1,5	2,0
	226.054	Resource Management	VU	1,5	2,0
	226.059	Environmental and Economic Assessment	VU	2,5	3,0
Transportation	230.012	Pavement Maintenance Management	VO	2,0	3,0
	230.042	National and European Transport Policies	VO	2,0	3,0
	230.044	Road Pavement Materials	VO	2,0	3,0
	230.045	Pavement Design and Modelling	VO	2,0	3,0
	230.056	Applied system dynamics modelling in transport	VU	2,0	3,0
	231.013	Seminar on transport planning	SE	2,0	2,0
	231.043	Field trip transport planning*	SE	2,0	2,0
	231.946	Fundamentals of traffic planning*	SE	2,0	3,5
Construction Process and Economics	234.116	International Construction Project Management	SE	2,0	2,0
	234.154	The future of construction processes	SE	1,5	1,5

Bachelor programme Civil Engineering and Bachelor Programme Environmental Engineering

Master programme Civil Engineering Science

Bachelor programme Environmental Engineering

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* If required in English