

English taught lectures at the Faculty of Civil Engineering, RWTH Aachen University

Due to organizational modifications, the accuracy of this information may be subject to change.

For further information please contact international@fb3.rwth-aachen.de

Faculty of
Civil Engineering



Course Name and Link to (English) Module Description	Language ¹⁾	Level	Semester Winter/ Summer	Credit Points (ECTS)	Responsible Professor
Advanced Structural Analysis	English	M.Sc.	W	8	Prof. Klinkel
Airport engineering II	German / English	M.Sc.	W	4	Prof. Reichmuth
Airport Management I	German / English	M.Sc.	W	2	Dr. Nießen
Airport Management II	German / English	M.Sc.	S	2	Dr. Nießen
Automated urban transportation systems	English	M.Sc.	S	3	Dr. Nießen
Brittle-Matrix Composite Structures: Modeling and Design Methods	English	M.Sc.	S	8	Dr.-Ing. Chudoba
Building Information Modeling	(Geo-)Databases	German / English	W	4	Prof. Blankenbach
			S	3	
2D/3D Building Information Systems					
Building Performance Simulation	English	M.Sc.	S	6	Dr.-Ing. Jérôme Frisch
Coastal Engineering	English	M.Sc.	S	4	Prof. Schüttrumpf
Concrete Design for Sustainability	English	M.Sc.	S	3	Prof: Matschei
Continuum Mechanics	English	M.Sc.	S	8	PD Dr. Simon
Design of Dependable Railway Systems	English	M.Sc.	W	3	Dr. Nießen
Ecolabeling	English	M.Sc.	S	4	Prof. Traverso
Engineering Hydrology	English	M.Sc.	S	5	Prof. Nacken

Environmental Sustainability in Transport Engineering		English	M.Sc.	W	6	Prof. Liu
Expanding Engineering Limits: Culture, Diversity and Gender - Lecture Part		English	M.Sc.	W	5	Prof. Leicht-Scholten
Expanding Engineering Limits: Culture, Diversity and Gender - In Practice	Reshaping Engineering Culture with Design Thinking²⁾	English	M.Sc.	W	3	Prof. Leicht-Scholten
	Discovering Innovation - Project Work Beyond Engineering³⁾			S	4	
Finite-Element-Technology		English	M.Sc.	S	6	Prof. Reese
Flood Risk Management		English	M.Sc.	W	3	Prof. Nacken
Geographic Information Systems in Water Management I		English	M.Sc.	S	4	Prof. Nacken
Geographic Information Systems in Water Management II		English	M.Sc.	W / S	4	Gramlich M.Sc.
Geotechnical Project Study		English	M.Sc.	S	5	Prof. Fuentes
Global Changes and Sustainable Development		English	M.Sc.	W / S	4	Prof. Nacken
Hydraulic Engineering Experiments⁴⁾		English	M.Sc.	W / S	4	Prof. Schüttrumpf
Hydraulic Engineering Seminar		English/ German	M.Sc.	W / S	3	Dr. Catrina Brüll
Hydrodynamic Simulation⁴⁾		English	M.Sc.	W / S	4	Prof. Schüttrumpf
Hydromechanical Internship		English / German	B.Sc.	S	5	
Hydromechanics III		Lecture and Exercise in German Language English learning material and English exam available	M.Sc.	W / S	4	Prof. Schüttrumpf
Industrial Wastewater Treatment		English	M.Sc.	W	4	Dr. Palmowski
Innovation & Diversity		English	M.Sc.	W	4	Prof. Leicht-Scholten

Introduction to Robotics		English	B.Sc.	S	3	Prof. Fuentes
Innovative Technologies in Construction		English/ German	M.Sc.	W	3	Prof. Klemt-Albert
Life Cycle Assessment - Consolidation		English	M.Sc.	W	5	Prof. Traverso
Matrix and Tensor Calculus		English / German	M.Sc.	W	5	Dr. Brepols , Prof. Waimann
Mechanics of Engineering Materials		English	M.Sc.	S	5	Prof. Reese
Mechanics of Materials		English	M.Sc.	W	8	Prof. Reese
Mobility Research and Transportation Modeling		English	M.Sc.	S	6	Mr. Kuhnimhof
Nonlinear Finite Element Methods for Solids		English	M.Sc.	S	5	Prof. Sauer Prof. Reese
Nonlinear Finite Element Methods in Civil Engineering		English	M.Sc.	S	4	Prof. Reese, Prof. Klinkel
Nonlinear Structural Analysis		English	M.Sc.	S	8	Prof. Klinkel
Numerical Methods		English	M.Sc.	W	4	Dr. Klarmann
Numerical Methods in Structural Mechanics and Dynamics		English	M.Sc.	W	12	Prof. Klinkel
Pavement Dynamics		English	M.Sc.	W / S	6	Prof. Liu
Plasticity and Fracture Mechanics		English	M.Sc.	S	6	Dr. Brepols
Plates and Shells		English	M.Sc.	W / S	8	Prof. Klinkel
Practical Course in Water Engineering and Management		English	B.Sc.	S	5	Prof. Schüttrumpf
Projectmanagement Advanced		English	M.Sc.	S	5	Prof. Klemt-Albert
Railway Timetabling, Operations and Control Systems⁵⁾	Railway Capacity Management and Operations	English	M.Sc.	W	6	Prof. Nießen; Dr. Jacobs

	Railway Operations Lab (exercise)			W		
	Railway Control Systems			S		
Railway Systems		English	M.Sc.	W	6	Dr. Kogel
Reshaping Engineering Culture with Design Thinking		English	M.Sc.	W	7	Prof. Leicht-Scholten
Sanitary Engineering in Developing Countries		English	M.Sc.	W	2	Dr. Haußmann
Seminar on Hydraulic Engineering		English	M.Sc.	W / S	3	Prof. Schüttrumpf
Social Development and Sustainability ⁶⁾		English	M.Sc.	W / S	4	Ms. Bosen
Soil Mechanics Specialization		English	M.Sc.	S	6	Prof. Fuentes
Structural Control and Health Monitoring		English	M.Sc.	W	3	Dr. Altay
Structural Dynamics		English	M.Sc.	W	8	Dr. Altay
Structural Steel III		English / German	M.Sc.	W	8	Prof. Feldmann
Sustainable Building Assessment Scheme		English	M.Sc.	W	3	Prof. Traverso
Sustainability Assessment Methods and Tools		English	M.Sc.	S	4	Prof. Traverso
Sustainability Strategies in Policy and Companies		English	M.Sc.	W	4	Prof. Traverso
Timber Structures I		English	M.Sc.	W / S	4	Prof. Hoffmeister
Timber Structures II		English	M.Sc.	S	8	Prof. Hoffmeister
Underground Infrastructure		English	M.Sc.	S	5	Prof. Fuentes
Water and Wastewater Treatment Technologies		English	M.Sc.	S	4	Prof. Wintgens
Water-Energy-Food-Nexus		English	M.Sc.	W / S	4	Prof. Nacken

Wind Engineering	English	M.Sc.	S	4	Prof. Kemper
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- 1) If in the language section the statement “English/ German” appears it is possible that the course will only be held in English once exchange students or other non-German speakers are present; please contact the course responsible prior to the beginning of the course (or at the beginning of the first lecture) to state that you would wish the course to be held in English if not already done so by the lecturer
- 2) Please note that to participate in this course you have participate in the course “Expanding Engineering Limits: Culture, Diversity and Gender - Lecture Part” in the same semester
- 3) Please note that participation in the course is only possible if you have successfully participated in the courses:
 - Expanding Engineering Limits: Culture, Diversity and Gender - Lecture Partand
 - Reshaping Engineering Culture with Design Thinking
- 4) This course will only be held in English language once international students are present; please contact the course responsible at the beginning of the semester asking for the course to be held in English.
- 5) Please note that there is only **one** exam for all three courses of this module that can only be taken after attending all three courses. Please do also pay attention that the courses are offered in different semesters (Summer/Winter). The order in which the courses are taken is irrelevant. However, basic knowledge from the course "Railway Systems" should be available for Railway Control Systems and Railway Capacity Management and Operations.
- 6) This course will not be available in the summer semester 2022