

Module number	Module name	Module coordinator
3010920	Pavement Technology 2	Prof. Dr. Alvaro García Hernandez alvaro@isac.rwth-aachen.de
Learning goals	Independent handling of laboratory equipment; ability to independently select and conceptualize procedures in road maintenance; independent selection of testing procedures before, during and after realization of road construction projects; in-depth insight into basic and special standards and their application.	
Content	Design of road structures; pavement construction and special construction methods with concrete, asphalt paving, paver technology, compaction; special construction methods (geotextiles, special pavements, open porous asphalt); compact asphalt; description, production and types of bitumen; assessment and evaluation of structural pavement condition; PMS; recycling of construction materials; laboratory testing; law and contract options in road construction.	
Teaching and learning methods	4 SWS lectures, 1 SWS exercise per week, and self-study	
Prerequisites	None	
(recommended) Requirements	Knowledge of the 'Fundamentals of Earthworks', bituminous and hydraulic binders, asphalt and concrete roadways and their dimensioning, production and testing is urgently recommended; basic knowledge of the relevant standards; fundamentals of statistics; differential and integral calculation of functions with several real variables; systems of equations.	
Language	English	
Applicability	Elective module in the Master's program Transport Engineering and Mobility.	
Requirements for earning credit points	Graded Written Exam. There are no prerequisites for participation in the written exam. In the context of the associated internship, bonus points can be acquired through voluntary contributions, which can be credited to the extent of a maximum of 20% of the written exam. The exact criteria for the acquisition of bonus points are specified in the CMS.	
Credit points and grades	8 ECTS Credits	
Module frequency	The module is offered every academic year in summer semester.	
Workload	The total workload is 240 hours.	
Module duration	The module lasts one semester.	