

# Mobility Science Curriculum (part-time)

Valid from Autumn Semester 2024/2025 / 07.09.2023

Semester	Context Modules	Project Modules	Subject-Specific Modules				Mathematics and Natural Science Modules	
Semester 8		Bachelor Thesis: Transportation Systems DE/EN 12	Elective Module 4 4	Elective Module 6 4	Elective Module 8 4			
Semester 7		Project Thesis: Transportation Systems DE/EN 6	Elective Module 3 4	Elective Module 5 4	Elective Module 7 4	Elective Module Cross-Curricular 4		
Semester 6	Elective Module Context 2	Transportation Practice Project 2 DE 4	Elective Module 2 4	Facility and Fleet Management DE 4	Reliability, Availability, Maintainability and Safety DE 4		Numerics DE	
Semester 5	Elective Module Context 2	Elective Module Context 2	Transportation Practice Project 1 DE 4	Elective Module 1 4	Operations Management Fundamentals DE 4	Operations Research DE 4	Physics 3 DE 4	
Semester 4	Digitisation of Economic Systems DE 2	Transportation Project 2 DE 4	Transportation Law DE 4	Maintenance DE 4	Data Analysis and Forecasting DE 4		Physics 2 DE 4	
Semester 3	Communication Competence 3 DE/EN 2	Transportation Project 1 DE 4	Transportation Economics 2 DE 4	Intermodality and Multimodality DE 4		Stochastics and Statistics DE 4	Physics 1 DE 4	
Semester 2	Communication Competence 2 DE/EN 2		Transportation Economics 1 DE 4	Transportation Systems - Operations DE 4	Computer Science Programming 2 DE 4	Analysis 2 DE 4	Linear Algebra 2 DE 4	
Semester 1	Communication Competence 1 DE/EN 2		Spatial Planning DE 4	Transportation Systems - Basics DE 4	Computer Science Programming 1 DE 4	Analysis 1 DE 4	Linear Algebra 1 DE 4	

Module Name  
Language of Instruction  
Credits

## Overview of Mobility Science elective modules

During your third and fourth year of study, you will choose eight of the following elective modules\*. This will allow you to create an individual profile in the following subject areas:

Modelling and Simulation of Transportation Systems

- Mobility Data
- Logistics
- Traffic Engineering

Semester 6/8	Logistik and Supply Chain Management 2 DE	Modeling and Simulation 2 DE	Transport Engineering 2 DE	Mobility Data Analytics DE	Control Technology & Customer Information DE	
Semester 5/7	Logistik and Supply Chain Management 1 DE	Modeling and Simulation 1 DE	Transport Engineering 1 DE	Mobility Data Mining DE	Network Development DE	Surveys and Samples DE

\* For modules that build on each other, part 1 must be completed in order to participate in part 2. It is, however, possible to also only select part 1.