

Transport Systems Curriculum (full-time)

Valid from Autumn Semester 2019/2020 / 12.02.2021

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

Module Name
Language of Instruction
Credits

Overview of Transportation Systems elective modules

During your third 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 | 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 | 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.