Number of Module	Name of Module	Lecturer
VW-ATL-77	Data and Models in Transport Planning	Prof. Rico Wittwer rico.wittwer@tu-dresden.de
Qualification Aim	Students have in-depth knowledge of concepts related to data preparation, analysis, and use for mobility system planning, as well as of fundamental evaluation and visualization techniques. They are able to define research questions within the framework of project-based studies using existing data and advanced statistical analysis methods, select and prepare appropriate data, design suitable methodological approaches and apply methods, conduct analyses, and present, discuss, and critically reflect on the results. You will be able to estimate and interpret simple statistical and econometric models.	
Content	The module covers the following topics: 1. Methods for data preparation, analysis, visualization, and interpretation in mobility system planning, 2. Fundamentals of data analysis and data visualization, 3. Data preparation techniques, 4. Concepts of data evaluation, techniques for presenting and communicating results, 5. Modeling approaches in transportation planning, 6. Areas of application and potential uses of models, 7. Input and validation variables in models, and 8. Software-supported estimation and evaluation of simple statistical and econometric models.	
Lehr- und Lernformen	2 SWS lecture, 2 SWS exercise and independent study.	
Requirements for Participation	No special knowledge is required.	
Usability	This module is one of 27 elective modules in the master's degree program Air Transport and Logistics, which must be chosen according to § 32 paragraph 3 of the examination regulations.	
Requirements for the Award of Credits	Credit points are awarded upon passing the module exam. The module exam consists of a portfolio representing 50 hours of work. Students may choose to submit the portfolio in either German or English.	
Credit Points and Grades	Students can earn 5 credit points for this module. The module grade corresponds to the grade on the exam.	
Häufigkeit des Moduls	The module is offered each winter semester.	
Workload	The total workload is 150 hours.	

Duration of the Module	The module lasts one semester.