Number of Module	Name of Module	Lecturer
VW-ATL-53a	Management of Public Transport Systems and Services	Prof. Jörn Schönberger joern.schoenberger@tu-dresden.de
Qualification Aim	Students are familiar with the decision problems that arise in the context of the design, configuration and operation of passenger transportation systems. They have an insight into the algebraic modeling of these decision situations and can apply techniques and tools with which the complex models can be solved. Students are able to select and apply the modeling and decision-making techniques they have learned in a goal-oriented manner. Furthermore, the students are strengthened in their personality.	
Content	The module covers the following topics: 1. Infrastructure planning, 2. Route planning, 3. Schedule planning, 4. Staff scheduling, 5. Specification of public transportation services, 6. Data sources for describing public transportation networks, 7. Optimization and simulation of public transportation systems and service delivery processes, and 8. Current state of research.	
Teaching and Learning Methods	2 SWS lecture, 2 SWS tutorial, and independent study.	
Requirements for Participation	The competencies to be acquired in the Operations Research and Logistics module are required, as well as basic knowledge at bachelor level of programming (e.g. VBA, PHP, Java, C++). The following literature is suitable for preparation: Stroustrup, B.: Programming: Principles and Practice Using C++, Addison Wesley, newest edition.	
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 earned when the module examination is passed. The module examination consists of a complex examination of 75 hours. The examination language is English.	
Credit Points and Grades	5 credit points can be acquired through the module. The module grade corresponds to the grade of the examination performance.	
Frequency of Module	The module is offered each academic year in the summer semester.	
Workload	The total workload is 150 hours.	

Duration of the Module	The module lasts one semester.