



Study Plan

M.Sc. Transport

Specialization: Transport Systems Engineering and Management

Faculty of Transport

Study plan for reference only; may be subject to change.

Students of the Transport Systems Engineering and Management specialisation acquire extended knowledge and skills in the areas of: road, railway and municipal transport systems control and management, optimization and planning of these transport systems, transport measurements and forecasting, as well as design of multimodal transport hubs and traffic modelling and planning these transport systems with the use of modern IT tools. In addition, students gain knowledge and skills in the field of automated vehicles and other solutions of transport automation and learn about the role of the human factor in intelligent transport systems. Other topics include environmental impact and environment protection, rules of shaping transport law and policies and management of the investment process in transport, including financing investment solutions.

The graduates may use their knowledge and skills by finding employment in:

- companies and local government units which deal with planning transport development and completion of investment processes in transport,
- companies that offer consulting services,
- study and design offices,
- research centres.

Study Plan M.Sc. Transport (Spec. Transport Systems Engineering and Management)

Lp.	Subject	Number of teaching hours				Weekly number of teaching hours (one semester is completed within 15 weeks)															
		Total	in it:*)				Semester 1					Semester 2					Semester 3				
			W	C	L	P	W	C	L	P	pts.	W	C	L	P	pts.	W	C	L	P	pts.
1	Planning of transport systems	30	15			15	1			1	2										
2	Measurements and prediction of traffic and transport	30	15	15			1 ^e	1			2										
3	Urban and regional transport management	30	15			15						1			1	2					
4	Desingning multimodal transport nodes	30	15		15							1 ^e	1		3						
5	Computer-aided planning of transport	45	15		30							1	2	3							
6	Human factor in intelligent transportation systems	30	15		15							1 ^e	1	2							
7	Systems, vehicles and infrastructure of automated transport	30	15		15		1	1		2											
8	Environmental protection in transport	30	15			15	1			1	2										
9	Managing investment process in transport	30	15	15								1 ^e	1		2						
10	Maintenance and management of urban and regional infrastructure	30	15			15	1			1	2										
11	Legal regulations in transport policy	15	15				1				1										
Number of teaching hours for specialization		330	165	30	75	60	6	1	1	3	11	5	1	4	1	12	0	0	0	0	0
			330				11					11					0				
Total number of teaching hours		990	495	195	135	165	14	5	4	3	30	13	4	5	5	32	6	4	0	3	30
			990				26					27					13				
Total ECTS points			92				30					32					30				
Number of exams			10				3					5					2				
Number of tests			41				22					15					4				
Comments:							Symbol: e - exam														
*) W - lecture, C - exercises, L - laboratory, P - project																					

