

**TABLE 5.1.b. Course specification by semesters and years of study for Basic academic studies  
- ROAD TRAFFIC ENGINEERING**

N	Code	Course name	S	Active learning classes				other classes	ECTS	C/O	Type
				L	P	OTC	IRP				
<b>FIRST YEAR</b>											
1.	DS-01	Applied Mathematics 1	1	2	2	0			7	C	AGE
2.	DS-02	Business Informatics	1	2	2	0			6	C	AGE
3.	DS-03	Introduction to Traffic and Transport	1	2	2	0			7	C	SP
4.	DS-04	Foreign Language 1 (English or French)	1	2	2	0			3	C	AGE
<b>OPTIONAL COURSES 1</b>											
5.	DS-30	Applied Psychology	1	2	2	0			7	O - 1	AGE
	DS-31	Information Technologies in Traffic	1	2	2	0			7	O - 1	AGE
6.	DS-05	Electrotechnics and Electronics	2	3	3	0			8	C	SP
7.	DS-06	Mechanics	2	3	3	0			8	C	TM
8.	DS-07	Management	2	2	2	0			6	C	TM
<b>OPTIONAL COURSES 2</b>											
9.	DS-32	Traffic Research Methods	2	2	2	0			8	O - 2	SP
	DS-33	Materials	2	2	2	0			8	O - 2	SP
<b>Total number of classes (lectures/practice + OTC/OC) and ECTS</b>				<b>20</b>	<b>20</b>				<b>60</b>		
<b>Total number of active classes in a year</b>				<b>40</b>							
<b>SECOND YEAR</b>											
10.	DS-08	Applied Mathematics 2	3	3	3	0			8	C	AGE
11.	DS-09	Traffic Regulations	3	3	3	0			8	C	SP
12.	DS-10	Engineering Graphics	3	3	2	0			6	C	TM
13.	DS-11	Business Statistics	3	2	3	0			7	C	TM
14.	DS-12	Measurement Instruments and Techniques	4	3	2	0			7	C	PA
15.	DS-13	Thermodynamics	4	3	3	0			7	C	TM
16.	DS-14	Foreign Language 2 (English, French)	4	1	3	0			3	C	AGE
<b>OPTIONAL COURSES 3</b>											
17.	DS-34	Fundamentals of Urbanism	4	3	2	0			7	O - 3	PA
	DS-35	Hydraulics and Pneumatics	4	3	2	0			7	O - 3	PA
18.	DS-36	Ecology and Environmental Protection	4	3	2	0			7	O - 3	TM
	DS-37	Machine Elements	4	3	2	0			7	O - 3	PA
<b>Total number of classes (lectures/practice + OTC/OC) and ECTS</b>				<b>24</b>	<b>23</b>				<b>60</b>		
<b>Total number of active classes in a year</b>				<b>47</b>							
<b>THIRD YEAR</b>											
19.	DS-15	Traffic Design	5	3	3	0			8	C	SP
20.	DS-16	Traffic Flow Analysis	5	3	2	0			7	C	SP
21.	DS-17	Traffic Infrastructure Planning	5	2	3	0			7	C	SP
22.	DS-18	Traffic Regulation and Management	5	3	3	0			8	C	PA
23.	DS-19	Road Capacity	6	3	2	0			8	C	SP
24.	DS-20	Foreign Language 3 (English, French)	6	1	3	0			3	C	AGE
25.	DS-21	Internship 1	6	0	0	0		6	3	C	PA
<b>OPTIONAL COURSES 4</b>											
26.	DS-38	Intelligent Traffic Systems	6	3	3	0			8	O - 4	SP
	DS-39	Operational Research in Traffic	6	3	3	0			8	O - 4	PA
27.	DS-40	Databases in Traffic Engineering	6	3	3	0			8	O - 4	SP
	DS-41	Managing Parking Facilities	6	3	3	0			8	O - 4	SP
<b>Total number of classes (lectures/practice + OTC/OC) and ECTS</b>				<b>21</b>	<b>22</b>			<b>6</b>	<b>60</b>		
<b>Total number of active classes in a year</b>				<b>43</b>							
<b>FOURTH YEAR</b>											
28.	DS-22	Traffic Safety	7	3	3	0			8	C	PA
29.	DS-23	Road and City Transport	7	3	3	0			8	C	TM
30.	DS-24	Road Traffic Technology	7	3	3	0			7	C	SP
31.	DS-25	Expertise of Traffic Accidents	7	3	3	0			7	C	PA
32.	DS-26	Managing Network Quality in Traffic	8	4	4	0			7	C	PA
33.	DS-27	Internship 2	8	0	0	0		6	3	C	PA
<b>OPTIONAL COURSES 5</b>											
34. 35.	DS-42	Managing Projects and Investments	8	3	3	0			6	O - 5	SP
	DS-43	Technology of Passenger PublicTransport	8	3	3	0			6	O - 5	PA
	DS-44	Transport of Hazardous Goods	8	3	3	0			6	O - 5	PA

	DS-45	Elements of Means of Transport and Transshipment	8	3	3	0			6	O-5	PA
36.	DS-28	Final Thesis- Research Paper	8	-	-	-		3	2	C	PA
37.	DS-29	Final Thesis - Preparing and Defending Paper	8	-	-	-	1		6	C	PA
<b>Total number of classes (lectures/practice + OTC/OC) and ECTS</b>			22	22	1		9	<b>60</b>			
<b>Total number of active classes in a year</b>			<b>45</b>								
<b>Total number of active classes, other classes for all years and ECTS</b>			<b>175</b>				<b>15</b>	<b>240</b>			
<p><b>Note:</b> Optional courses 1 - a student chooses 1 out of 2 optional courses in the 1<sup>st</sup> semester  Optional courses 2 - a student chooses 1 out of 2 optional courses in the 2<sup>nd</sup> semester  Optional courses 3 - a student chooses 2 out of 4 optional courses in the 4<sup>th</sup> semester  Optional courses 4 - a student chooses 2 out of 4 optional courses in the 6<sup>th</sup> semester  Optional courses 5 - a student chooses 2 out of 4 optional courses in the 8<sup>th</sup> semester</p>											

S - semester

L - lecture

P - practice

C - compulsory

O - optional

OTC - other types of classes

TM -Theoretical and methodological

PA - Professional and applicable

AGE - Academic general education

SP - Scientific and professional