Study plan

Name of study plan: Master Part-Time LA from 2024/25

Faculty/Institute/Others:

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch:

Program of study: Logistics and Transport Processes Control

Type of study: Follow-up master combined

Required credits: 117
Elective courses credits: 3
Sum of credits in the plan: 120

Note on the plan:

Name of the block: Compulsory courses Minimal number of credits of the block: 103

The role of the block: Z

Code of the group: 1S-NK-LA-25/26

Name of the group: 1st Sem. Master Part-Time LA from 2025/26

Requirement credits in the group: In this group you have to gain 28 credits

Requirement courses in the group: In this group you have to complete 9 courses

Credits in the group: 28 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11LIP2	Linear Programming 2 Pavla Pecherková, Ivan Nagy, Karel Je men Pavla Pecherková Ivan Nagy (Gar.)	Z,ZK	3	2P+1C+10B	Z	Z
11TER	Game Theory and Optimal Decision-Making Magdalena Hykšová Magdalena Hykšová (Gar.)	ZK	2	2P+0C+8B	Z	Z
17LSC	Logistics in Smart Cities Tomáš Horák Tomáš Horák (Gar.)	Z,ZK	6	2P+2C+14B	Z	Z
17TZNK	Technology of Railway Transport Michal Drábek, Rudolf Vávra, Vít Janoš Vít Janoš (Gar.)	Z,ZK	5	12B	Z	Z
21TZOK	Inventory, Replacement and Scheduling Theory Dušan Teichmann	Z,ZK	4	10B	Z	Z
14GISS	Geographical Information Systems Vít Fábera, František Kekula, Tomáš Janata, Zuzana Purkrábková Tomáš Janata Tomáš Janata (Gar.)	KZ	2	0P+2C+8B	Z	Z
17MADS	Management of Transport Systems Roman Št rba Roman Št rba (Gar.)	KZ	2	2P+0C+8B	Z	Z
17TSI	Technology of Road Transport Michal Drábek, Rudolf Vávra, Vít Janoš, Daniel Drnec Michal Drábek (Gar.)	KZ	2	2P+0C+8B	Z	Z
15J2A1	Language - English 1 Jitka He manová, Dana Boušová, Lenka Monková, Peter Morpuss, Markéta Vojanová, Marie Michlová, Markéta Musilová, Jan Feit, Eva Rezlerová	Z	2	0P+2C+10B	Z	Z

Characteristics of the courses of this group of Study Plan: Code=1S-NK-LA-25/26 Name=1st Sem. Master Part-Time LA from 2025/26

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11LIP2	Linear Programming 2	Z,ZK	3			
Formulation of the task of integer programming, branch and bound method of numerical solution, problems about knapsack, travelling salesman, sets, location of stores and post box						
tasks of scheduling, heuristics, metaheuristics - genetic algorithms, ant colony optimization.						
11TER	Game Theory and Optimal Decision-Making	ZK	2			
Decision-making theory	, utility theory. Explicit form games, backward induction. Normal form games. Antagonistic conflict, matrix games. Repeated $\mathfrak c$, games, evolutiona	ry game theory.			
Cooperative games wit	hout transferable payoffs. Cooperative games with transferable payoffs (imputation, core, Shapley value, nucleolus). Applicati	ons of game theo	ry above all in			
economics and transpo	rtation.					
17LSC	Logistics in Smart Cities	Z,ZK	6			
Development of cities in time, city and region, mobility of city residents and movement of goods, sustainability as a concept, Smart Cities, city as a system and its components, quality						

Development of cities in time, city and region, mobility of city residents and movement of goods, sustainability as a concept, Smart Cities, city as a system and its components, quality of life, individual quality of life, city "smartness" assessment, legislation in Smart Cities, Smart Cities transformation, last mile logistics, e-commerce, new approaches in last mile logistics, last mile logisitics in cities and in regions.

17TZNK	Technology of Railway Transport	Z,ZK	5			
Track line capacity assessment, model operational situation with a system running time between IPT-nodes, calculation of traction energy savings compared with infrastructure costs						
for designing of fleeting	crossing station, solving of capacity problem and blocking time in relation to train protection system, robustness of timetable,	system concept	of freight train			
paths, guidelines for cer	ntralised operational traffic control and management.					
21TZOK	Inventory, Replacement and Scheduling Theory	Z,ZK	4			
Inventory theory - introd	uction, static models, deterministic dynamic models, stochastic dynamic models. Replacement theory - introduction, models	for replacement of	of items that			
deteriorate with time, me	odels for replacement of items that fail completely. Scheduling theory - introduction, single machine scheduling problems, paral	llel machine sche	duling problems,			
flow shop scheduling pr	oblems and job shop scheduling problems.					
14GISS	Geographical Information Systems	KZ	2			
Construction of saving f	ormat of space-oriented information land-survey and cartography minimum basic tasks of spatial operations principles of terr	itorial identification	n			
17MADS	Management of Transport Systems	KZ	2			
Functions, processes ar	nd systems of management in transport, organisational structures, strategy, social responsibility, soft skills.	'				
17TSI	Technology of Road Transport	KZ	2			
Legislative, operational,	technical, logistic and safety conditions of road transport, basic transport technologies, special transport, international agree	ments, requireme	ents on the			
parameters and special	ization of transport, handling and loading/unloading means, maintenance, service and repairs of road vehicles, safety of road	transport and ch	oice of optimal			
transport unit.						
15J2A1	Language - English 1	Z	2			
Presentation Skills - exp	ert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work engagement.	'				

Code of the group: 2S-NK-LA-25/26

Name of the group: 2nd Sem. Master Part-Time LA from 2025/26

Requirement credits in the group: In this group you have to gain 25 credits

Requirement courses in the group: In this group you have to complete 8 courses

Credits in the group: 25 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11THRO	Queuing Theory Šárka Vorá ová Šárka Vorá ová Šárka Vorá ová (Gar.)	ZK	2	2P+0C+8B	L	Z
21KMDK	Quantitative Methods in Transport Dušan Teichmann	Z,ZK	7	14B	L	Z
17MID	Managerial Information Systems in Transport Václav Baroch Václav Baroch (Gar.)	Z,ZK	3	2P+1C+10B	L	Z
17RKOP	Management of commercial projects in transport Petra Skolilová, Alexandra Dvo á ková Petra Skolilová Petra Skolilová (Gar.)	Z,ZK	3	2P+1C+10B	L	Z
14BIG	Big Data Jana Kaliková, Jan Kr ál Jana Kaliková Jana Kaliková (Gar.)	KZ	2	0P+2C+8B	L	Z
20TEL	Telecommunications	KZ	3	2P+1C+10B	L	Z
17DOCH	Travel Behavior Vít Janoš, Milan K íž Vít Janoš (Gar.)	KZ	3	3P+0C+10B	L	Z
15JBA2	Language - English 2 Jitka He manová, Dana Boušová, Lenka Monková, Peter Morpuss, Markéta Vojanová, Marie Michlová, Markéta Musilová, Jan Feit, Eva Rezlerová,	Z	2	0P+2C+10B	L	Z

Characteristics of the courses of this group of Study Plan: Code=2S-NK-LA-25/26 Name=2nd Sem. Master Part-Time LA from 2025/26 11THRO **Queuing Theory** Discrete event process, definition, random distribution, and probability. Basic processes, process of revitalisation. Markov process, Markov models, Kendall classification, model M/M/1, models M/M/n. Non-markovian models, model M/C/n, models G/G/n. Models with continuous flow. Service net, examples of Petri net. Computer simulation. Quantitative Methods in Transport The course focuses on the issue of the use of undirected graphs tree type, planar graphs and their coloring. Further distribution problems, facility location problems are formulated and solved such as models of integer linear programming. Besides the use of exact methods there are described simple and also more sofisticated heuristics (metaheuristics) methods. Managerial Information Systems in Transport IT and their use in building IS of modern transport company. New EU legislation on cyber security and data protection puts transport organizations in front of new challenges. The course focuses on the security of IS and possible sources of danger. The practical part deals with the process of building a new IS from the idea through the timetable and the financial budget, the basic documents for the possible assignment of the contract Management of commercial projects in transport Business project (customer, activities, output - quality, time, money), project surroundings, location of the project (area analysis, traffic flows, authorization procedure), organizational structure of the project, sources of financing, customer-supplier relations, feasibility studies, sensitivity and multi-criteria analysis, financial and value analysis, management of project changes. 14BIG Big Data ΚZ Principle of MapReduce. Basic Principles of Big Data Management. Comparison and Classification of NoSQL Databases. Key Database Value Database. Column Databases. Document Databases. Graph Databases-Basic Principles. Graph Databases-Advanced Aspects. Indexing. Interpretation. Advanced Principles Big Data Management. NewSQL Database. Cloud

20TEL **Telecommunications** ΚZ Status quo and new trends in telecommunications systems. Economical and legal aspects of telecommunications networks design and telecommunications services provisioning, identification and quantification of hIererchical telecommunications networks and telecommunication services performance based on addopted performance parameters, telecommunication

computing. Data warehouses and Big Data. Cloud computing. Data warehouses and Big Data. Other Big Data issues.

services typically applied within transport and specifically logistic solutions.

17DOCH Travel Behavior Investigation of causal effects in travel behavior research (quasi-experimental and experimental approaches). Data collection (theory of measurement; design of research instrument and data collection). Analysis and interpretation of data (advanced regression models; issues of analysis and interpretation of results: effect size, practical vs. statistical significance). Analysis and interpr. of data (surveys, choice exp., panel. data). Language - English 2 Presentation Skills - expert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work engagement

Code of the group: 3S-NK-LA-25/26

Name of the group: 3rd Sem. Master Part-Time LA from 2025/26

Requirement credits in the group: In this group you have to gain 22 credits

Requirement courses in the group: In this group you have to complete 6 courses

Credits in the group: 22 Note on the group:

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Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11STS	Stochastic Systems Pavla Pecherková, Šárka Vorá ová, Evženie Uglickich, Natálie Blahitka, Michal Matowicki Pavla Pecherková Šárka Vorá ová (Gar.)	Z,ZK	4	2P+2C+14B	Z	Z
17DOPM	Transportation Planning and Modeling	Z,ZK	6	2P+2C	Z	Z
17PPC	Carriage Processes Roman St rba Roman St rba (Gar.)	ZK	3	2P+0C	Z	Z
17RVIP	Public Project Management in Transport Alexandra Dvo á ková, Olga Mertlová, Daniel Pilát Olga Mertlová (Gar.)	Z,ZK	5	2P+2C+14B	Z	Z
17AMAK	Application of Marketing Tools in Transport Industry	KZ	2	10B	Z	Z
15JBA3	Language - English 3 Jitka He manová, Dana Boušová, Lenka Monková, Peter Morpuss, Markéta Vojanová, Marie Michlová, Markéta Musilová, Jan Feit, Eva Rezlerová,	Z	2	0P+2C+10B	Z	Z

11STS	Stochastic Systems	Z,ZK	4
The subject deals w	ith the problems of mathematical modelling of dynamical systems, estimation od these models and their utilization for predictior	n. The results are ill	ustrated on
practical transportat	ion tasks. Mathematical theory roots from probability and mathematical statistics and they use the methods of the Bayesian pro	babilistic approach	
17DOPM	Transportation Planning and Modeling	Z,ZK	6
Basic steps and too	ls used within four step model (trip generation, trip distribution, mode choice and trip distribution). Mobility and availability in urb	an areas, land use.	New trends for
transportation plann	ing and modelling.		
17PPC	Carriage Processes	ZK	3
17110	Carriage i rocesses		3
_	international carriages, nomenclature of goods, pricing, contracting, responsibility for damages.	ZIX	3
Domestic carriages		Z,ZK	5
Domestic carriages	international carriages, nomenclature of goods, pricing, contracting, responsibility for damages.	Z,ZK	5
Domestic carriages 17RVIP Basic concepts of po	international carriages, nomenclature of goods, pricing, contracting, responsibility for damages. Public Project Management in Transport	Z,ZK	5
Domestic carriages. 17RVIP Basic concepts of project and pre-project.	international carriages, nomenclature of goods, pricing, contracting, responsibility for damages. Public Project Management in Transport roject management in the public sector, used procedures and standards of project management, organizational structure in project	Z,ZK	5
Domestic carriages 17RVIP Basic concepts of project and pre-proj 17AMAK	niternational carriages, nomenclature of goods, pricing, contracting, responsibility for damages. Public Project Management in Transport roject management in the public sector, used procedures and standards of project management, organizational structure in project preparation in transport and transport infrastructure and their specifics, feasibility study and CBA, project evaluation.	Z,ZK	5 ne public secto
Domestic carriages 17RVIP Basic concepts of project and pre-proj 17AMAK	international carriages, nomenclature of goods, pricing, contracting, responsibility for damages. Public Project Management in Transport roject management in the public sector, used procedures and standards of project management, organizational structure in project preparation in transport and transport infrastructure and their specifics, feasibility study and CBA, project evaluation. Application of Marketing Tools in Transport Industry	Z,ZK	5 ne public secto

Code of the group: 4S-NK-LA-25/26

Name of the group: 4th Sem. Master Part-Time LA from 2025/26

Requirement credits in the group: In this group you have to gain 2 credits

Requirement courses in the group: In this group you have to complete 1 course

Credits in the group: 2

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
15JBA4	Language - English 4 Jitka He manová, Dana Boušová, Lenka Monková, Peter Morpuss, Markéta Vojanová, Marie Michlová, Markéta Musilová, Jan Feit, Eva Rezlerová,	ZK	2	0P+2C+10B	L	Z

Characteristics of the courses of this group of Study Plan: Code=4S-NK-LA-25/26 Name=4th Sem. Master Part-Time LA from 2025/26

15JBA4	Language - English 4	ZK	2
Presentation Skills - ex	pert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work engagement.	Optional courses f	or certificates
FCF CAF			

Code of the group: XD-NK-LA-25/26

Name of the group: Thesis Master Part-Time LA from 2025/26

Requirement credits in the group: In this group you have to gain 18 credits Requirement courses in the group: In this group you have to complete 1 course

Credits in the group: 18 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L	Z
12XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L	Z
14XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L	Z
15XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L L	Z
16XNDM	Master Thesis for study programme LA P emysl Toman	Z	18	0P+20C+70B	L	Z
17XNDM	Master Thesis for study programme LA Tomáš Horák, Michal Drábek, Rudolf Vávra, Vít Janoš, Roman Št rba, Václav Baroch, Petra Skolilová, Alexandra Dvo á ková, Milan K íž, Václav Baroch (Gar.)	Z	18	0P+20C+70B	L	Z
18XNDM	Master Thesis for study programme LA Nela Kr má ová	Z	18	0P+20C+70B	L	Z
20XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L	Z
21XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L	Z
22XNDM	Master Thesis for study programme LA	Z	18	0P+20C+70B	L	Z

Characteristics of the courses of this group of Study Plan: Code=XD-NK-LA-25/26 Name=Thesis Master Part-Time LA from 2025/26

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11XNDM	Master Thesis for study programme LA	Z	18
12XNDM	Master Thesis for study programme LA	Z	18
14XNDM	Master Thesis for study programme LA	Z	18
15XNDM	Master Thesis for study programme LA	Z	18
16XNDM	Master Thesis for study programme LA	Z	18
17XNDM	Master Thesis for study programme LA	Z	18
18XNDM	Master Thesis for study programme LA	Z	18
20XNDM	Master Thesis for study programme LA	Z	18
21XNDM	Master Thesis for study programme LA	Z	18
22XNDM	Master Thesis for study programme LA	Z	18

Code of the group: XS-NK-LA-25/26

Name of the group: Thesis Seminary Master Part-Time LA from 2025/26 Requirement credits in the group: In this group you have to gain 8 credits

Requirement courses in the group: In this group you have to complete 1 course

Credits in the group: 8 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
11XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
12XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
14XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
15XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
22XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
17XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
18XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
20XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
21XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z
16XN4K	Seminar for Diploma Thesis	Z	8	8B	L	Z

Characteristics of the courses of this group of Study Plan: Code=XS-NK-LA-25/26 Name=Thesis Seminary Master Part-Time LA from 2025/26

11XN4K	Seminar for Diploma Thesis	Z	8
12XN4K	Seminar for Diploma Thesis	Z	8
14XN4K	Seminar for Diploma Thesis	Z	8
15XN4K	Seminar for Diploma Thesis	Z	8
22XN4K	Seminar for Diploma Thesis	Z	8
17XN4K	Seminar for Diploma Thesis	Z	8
18XN4K	Seminar for Diploma Thesis	Z	8
20XN4K	Seminar for Diploma Thesis	Z	8
21XN4K	Seminar for Diploma Thesis	Z	8
16XN4K	Seminar for Diploma Thesis	Z	8

Name of the block: Compulsory elective courses

Minimal number of credits of the block: 6

The role of the block: PV

Code of the group: Y2-NK-LA-24/25

Name of the group: Comp. Sel. Courses Master Part-Time LA from 2024/25 Requirement credits in the group: In this group you have to gain 6 credits

Requirement courses in the group: In this group you have to complete 3 courses

Credits in the group: 6 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
17W2AM	Application of Marketing Tools in Transportation Alexandra Dvo á ková	KZ	3	8B	L	PV
21W2CR	CRM	KZ	3	8B	L	PV
17W2FM	Financing in Urban Mass Transportation Václav Baroch Václav Baroch (Gar.)	KZ	3	8B	Z	PV
21W2FM	Aviation Company Financial Management Radoslav Zozu ák Radoslav Zozu ák	KZ	3	8B	Z	PV
15W2HS	Road Transport History	KZ	3	8B	L	PV
14W2KI	Capital Investment in Transportation and Telecommunications	KZ	3	8B	L	PV
15W2MS	Sociology for Managers Martina Šmidochová	KZ	3	8B	Z	PV
21W2MK	Marketing of Air Transport	KZ	3	8B	L	PV
15W2OZ	Health Protection in Transportation and EU Petr Musil	KZ	3	8B	Z	PV
15W2PT	Food in Transportation Petr Musil	KZ	3	8B	L	PV
21W2PP	Law and Operation in Air Transport	KZ	3	8B	L	PV
15W2SR	Stylistics and Rhetorics	KZ	3	8B	Z	PV
15W2TS	Technician and Contemporary Society	KZ	3	8B	L	PV

Characteristics of the courses of this group of Study Plan: Code=Y2-NK-LA-24/25 Name=Comp. Sel. Courses Master Part-Time LA from 2024/25

17W2AM	Application of Marketing Tools in Transportation	KZ	3
Application of mark	eting principles in transport issues, marketing tools suitable for transport, case studies of the use of marketing in the sphere of pu	ıblic passenger tra	ansport.
21W2CR	CRM	KZ	3
Introduction to CRI	1. Analysis of air accidents. Human factor. Error. Historical development of CRM. Health and fitness. Stress and its effect on the h	uman body. Fatigu	e Sleep &
Vigilance. Informati	on Processing. Situational Awareness. Workload Management. Decision Making. Communication. Leadership & Decision Making. Communication. Leadership & Decision Making. Communication. Leadership & Decision Making. Communication.	viour. Automation.	
17W2FM	Financing in Urban Mass Transportation	KZ	3
UMT history and de	evelopment in Prague and other cities in the world. Building and operation of public tram, bus, and trolleybus networks. Undergrou	nd building and o	peration. Other
UMT types. UMT d	evelopment in small towns. Particularities of investment and operation financing of individual UMT types. Historic and present mo	dels of UMT finance	cing. Transport
inspection and bline	passengers. Tourism & DMT. UMT typology & passengers. Tourism & DMT. UMT typology & DMT. Choice of optimum financing.		
21W2FM	Aviation Company Financial Management	KZ	3
Theories of corpora	te finance - financial statements, budget, forecast. Financial policy of the company. Financial resources - long-term financial reso	urces, depreciatio	n, retained
earnings, shares, b	onds, loans, leasing, capital. Financial and economic analysis of the company - structure and content.		
15W2HS	Road Transport History	KZ	3
Roads and road tra	ffic in the Ancient Age, corridors of main mediveal pathways. Development of road traffic in the modern period, acceleration of ro	ad transport deve	opment during
1st part of 20th cer	tury. Development of road layout, geometric and construction layers. Beginning of modern road civil engineering. Development of	road travelling in	modern period
History of road inte	rections, bridges and traffic control, development of road signs.		
14W2KI	Capital Investment in Transportation and Telecommunications	KZ	3
Financial market, in	vestment desicion making - long term goals and investment strategies, long term financing	'	

15W2MS	Sociology for Managers	KZ	3
Sociological appro	ach to a corporation. Corporation and its organization. Corporation and its running - human role and communication. Corporation	n, its culture and so	cial system.
Human's work pos	ition in free market economy. Corporate directorship, work groups, adaptation, strife, different roles and positions in corporation.		
21W2MK	Marketing of Air Transport	KZ	3
Definition, purpose	, evolution, stages and types of marketing. Marketing in air transportation. Marketing research. Market segmentation. Airlines ma	rketing strategies.	Airline Products
ield management	and revenues. Air transport market sales.		
15W2OZ	Health Protection in Transportation and EU	KZ	3
lealth protection in	n transportation in CR in the past and present. Conditions before 1989 and after, current legislature, future prospects. Harmonisa	ation of legislation v	with other EU
nembers. Fundam	ental principles of health protection and support in selected EU countries.		
5W2PT	Food in Transportation	KZ	3
he nutrition policy	. Interaction transportation and foodstuffs. The health risks. Hygienic safeguard. The practical examples from the Czech Republic	and from the worl	d. The issues of
lining cars, work to	ains and other railroad equipment. Legislation.		
21W2PP	Law and Operation in Air Transport	KZ	3
Development of av	iation law. International conventions on civil aviation. International organisations and including of the Czech Republic in these org	ganisations. EU leg	islation and civi
viation. Execution	of state administration and state supervision in matters of civil aviation, in accordance with Act No. 49/1997 Col. Facilitation. Res	sponsibilities of air	carriers for
oassengers, lugga	ge and cargo. The safe transport of dangerous goods.		
15W2SR	Stylistics and Rhetorics	KZ	3
Basic skills of oral	and written expression as a means of human communication. Basic information about speech, articulation, oral and written lang	uage. Teaching to	speak well-voca
organs, voice traini	ng. Language semantics, language syntactic and the pragmatic aspect. Creative thought and its oral and written expression. Pract	tice - cultivating the	skills of speech
15W2TS	Technician and Contemporary Society	KZ	3
Why to take off a h	at in a room and open a door for a lady, are there simple solutions, science vs belief, do we need to know or is it enough to turn of	on a PC, it must be	true - it's on the
nternet and in new	spapers, what are the sights for, interest in public affairs - a hangover from the past?		

Name of the block: Jazyky

Minimal number of credits of the block: 8

The role of the block: J

Code of the group: JZ-NP-LA-20/21

Name of the group: Language Courses Master Full-Time LA from 2020/21 Requirement credits in the group: In this group you have to gain 8 credits

Requirement courses in the group: In this group you have to complete 4 courses

Credits in the group: 8 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
15J2F1	Language - French 1 Irena Veselková	Z	2	0P+2C+10E	3 Z	J
15J2l1	Language - Italian 1 Irena Veselková	Z	2	0P+2C+10E	3 Z	J
15J2N1	Language - German 1 Eva Rezlerová, Martina Navrátilová, Jana Štikarová	Z	2	0P+2C+10E	3 Z	J
15J2R1	Language - Russian 1 Marie Michlová	Z	2	0P+2C+10E	Z	J
15J2S1	Language - Spanish 1 Nina Hricsina Puškinová	Z	2	0P+2C+10E	Z	J
15JBF2	Language - French 2 Irena Veselková	Z	2	0P+2C+10E	B L	J
15JBI2	Language - Italian 2	Z	2	0P+2C+10E	B L	J
15JBN2	Language - German 2 Eva Rezlerová, Martina Navrátilová, Jana Štikarová	Z	2	0P+2C+10E	B L	J
15JBR2	Language - Russian 2 Marie Michlová	Z	2	0P+2C+10E	B L	J
15JBS2	Language - Spanish 2 Nina Hricsina Puškinová, Zuzana Krinková	Z	2	0P+2C+10E	B L	J
15JBF3	Language - French 3 Irena Veselková	Z	2	0P+2C+10E	3 Z	J
15JBI3	Language - Italian 3 Irena Veselková	Z	2	0P+2C+10E	3 Z	J
15JBN3	Language - German 3 Eva Rezlerová, Martina Navrátilová, Jana Štikarová	Z	2	0P+2C+10E	3 Z	J
15JBR3	Language - Russian 3 Marie Michlová	Z	2	0P+2C+10E	3 Z	J
15JBS3	Language - Spanish 3 Nina Hricsina Puškinová	Z	2	0P+2C+10E	3 Z	J
15JBF4	Language - French 4 Irena Veselková	ZK	2	0P+2C+10E	B L	J
15JBI4	Language - Italian 4	ZK	2	0P+2C+10E	B L	J

15JBN4	Language - German 4	ZK	2	0P+2C+10B	L	J
	Eva Rezlerová, Martina Navrátilová, Jana Štikarová Language - Russian 4					
5JBR4	Marie Michlová	ZK	2	0P+2C+10B	L	J
5JBS4	Language - Spanish 4 Eva Rezlerová, Nina Hricsina Puškinová	ZK	2	0P+2C+10B	L	J
naracteristics of th 20/21	e courses of this group of Study Plan: Code=JZ-NP-LA-20/21 N	ame=Langua	ge Cour	ses Maste	r Full-Tim	e LA fro
	inguage - French 1				Z	2
	Style. Selection of conversation topics relating to transportation sciences. Developing	perceptive and c	ommunicati	ive skills, feed	back skills, s	ummarisir
	turing presentations and meeting minutes, elementary rhetorics of foreign language a	nd practical application	ation, forma	al and technica	al registers a	nd their us
nguage of management.	to P				- -	
	Inguage - Italian 1 d Style. Selection of conversation topics relating to transportation sciences. Developing	r nercentive and a		ı	Z	2
	turing presentations and meeting minutes, elementary rhetorics of foreign language at					
nguage of management.	annig procentations and mooting immutes, elementary moteries of lensigh language at	na praotioai appilo			ai rogiotoro a	
5J2N1 La	inguage - German 1				Z	2
	Style. Selection of conversation topics relating to transportation sciences. Developing	perceptive and c	ommunicati	ive skills, feed	back skills, s	ummarisir
	turing presentations and meeting minutes, elementary rhetorics of foreign language a	nd practical applic	ation, forma	al and technica	al registers a	nd their us
nguage of management.					-	
	inguage - Russian 1	r nercentive and a			Z	2
	d Style. Selection of conversation topics relating to transportation sciences. Developing turing presentations and meeting minutes, elementary rhetorics of foreign language ar					
nguage of management.		na praemear appile			ai rogiotoro a	
5J2S1 La	inguage - Spanish 1				Z	2
	Style. Selection of conversation topics relating to transportation sciences. Developing	perceptive and c	ommunicati	ive skills, feed	back skills, s	ummarisir
	turing presentations and meeting minutes, elementary rhetorics of foreign language a	nd practical application	ation, forma	al and technica	al registers a	nd their us
nguage of management.					_	
	inguage - French 2			l l	Z	2
	d Style. Selection of conversation topics relating to transportation sciences. Developing turing presentations and meeting minutes, elementary rhetorics of foreign language at					
iguage of management.	turing presentations and meeting minutes, elementary metorics of foreign language at	na practical applica	ation, ionne	ai and tecinica	ai registers a	na men a
 	inguage - Italian 2				7	2
	d Style. Selection of conversation topics relating to transportation sciences. Developing	g perceptive and c	ommunicati	ive skills, feed	back skills, s	ummarisir
	turing presentations and meeting minutes, elementary rhetorics of foreign language a	nd practical applic	ation, forma	al and technica	al registers a	nd their us
nguage of management.						
	inguage - German 2	r naraantiya and a			Z	2
	d Style. Selection of conversation topics relating to transportation sciences. Developing turing presentations and meeting minutes, elementary rhetorics of foreign language at					
nguage of management.	taring procontations and mooting minutes, clotheridary motories of foreign language at	na praotioai applio	ation, ionne	ar arra tooriino	ai rogiotoro a	na tron ac
5JBR2 La	inguage - Russian 2				Z	2
	d Style. Selection of conversation topics relating to transportation sciences. Developing	perceptive and c	ommunicati	ive skills, feed	back skills, s	ummarisin
	turing presentations and meeting minutes, elementary rhetorics of foreign language a	nd practical applic	ation, forma	al and technica	al registers a	nd their us
nguage of management.	0 110				- -	
	Inguage - Spanish 2 I Style. Selection of conversation topics relating to transportation sciences. Developing	a porcontive and c	ommunicati	I	Z	2 ummarisin
	turing presentations and meeting minutes, elementary rhetorics of foreign language at					
nguage of management.		na praemear appile			ai rogiotoro a	
5JBF3 La	inguage - French 3				Z	2
rammar and stylistics. Se	ection of conversation and professional topics based on the language level and study	focus at the Facult	ty. Improver	nent of langua	age structure	knowledg
	nicative skills, vocabulary development. Basic stylistic forms. Presentation of own know	vledge in oral and	written forn	n. Work with (p	orofessional)	text and it
atures. Practice of oral ar	· · · · · · · · · · · · · · · · · · ·					
l l	inguage - Italian 3	focus at the Facult	u Improvor	1	Z	2 knowledge
	ection of conversation and professional topics based on the language level and study nicative skills, vocabulary development. Basic stylistic forms. Presentation of own knov			_	-	_
atures. Practice of oral ar		riougo iii orai aiia	William Torri	ii. Work war (protocolorial	toxt and n
5JBN3 La	inguage - German 3				Z	2
	ection of conversation and professional topics based on the language level and study	focus at the Facult	ty. Improver	ment of langua	age structure	knowledg
	nicative skills, vocabulary development. Basic stylistic forms. Presentation of own know	vledge in oral and	written forn	n. Work with (բ	orofessional)	text and it
atures. Practice of oral ar	·			1	7	
	inguage - Russian 3 ection of conversation and professional tonics based on the language level and study.	focus at the English	ty Improver	1	Z	2 knowleda
	ection of conversation and professional topics based on the language level and study nicative skills, vocabulary development. Basic stylistic forms. Presentation of own knov			_	-	_
atures. Practice of oral ar		2-9 o.a. a.iu			2.200.01101)	
	inguage - Spanish 3				Z	2
I	ection of conversation and professional topics based on the language level and study	focus at the Facult	ty. Improver	1	į.	
	nicative skills, vocabulary development. Basic stylistic forms. Presentation of own know	vledge in oral and	written forn	n. Work with (բ	orofessional)	text and it
atures. Practice of oral ar	·			1	¹	
· ·	inguage - French 4	.			ZK	2
=	ection of conversation and professional topics based on the language level and study			_	-	_
a perceptive and commu	nicative skills, vocabulary development. Basic stylistic forms. Presentation of own know d written presentation	vieuge iii orai and	willen lott	ii. vvoik witti (F	บเบเซออเปกลไ)	וכאו מווט וו

features. Practice of oral and written presentation.

15JBI4	Language - Italian 4	ZK	2
Grammar and stylist	cs. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement o	f language structure	knowledge
and perceptive and o	communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wor	k with (professional)	text and its
features. Practice of	oral and written presentation.		
15JBN4	Language - German 4	ZK	2
Grammar and stylist	cs. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement o	f language structure	knowledge
and perceptive and o	ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wor	k with (professional)	text and its
features. Practice of	oral and written presentation.		
15JBR4	Language - Russian 4	ZK	2
Grammar and stylist	cs. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement o	f language structure	knowledge
and perceptive and o	communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wor	k with (professional)	text and its
features. Practice of	oral and written presentation.		
15JBS4	Language - Spanish 4	ZK	2
Grammar and stylist	cs. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement o	f language structure	knowledge
and perceptive and o	communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wor	k with (professional)	text and its
	oral and written presentation.		
	List of courses of this pass:		
Code	Name of the course	Completion	Credits
11LIP2	Linear Programming 2	Z,ZK	3
Formulation of the ta	sk of integer programming, branch and bound method of numerical solution, problems about knapsack, travelling salesman, sets,	location of stores and	post boxes,
	tasks of scheduling, heuristics, metaheuristics - genetic algorithms, ant colony optimization.		
11CTC	Stochastic Systems	7 7K	1

Code	Name of the course	Completion	Credits
11LIP2	Linear Programming 2	Z,ZK	3
Formulation of the	task of integer programming, branch and bound method of numerical solution, problems about knapsack, travelling salesman, sets, loc	ation of stores and	post boxes
	tasks of scheduling, heuristics, metaheuristics - genetic algorithms, ant colony optimization.		
11STS	Stochastic Systems	Z,ZK	4
The subject deal	s with the problems of mathematical modelling of dynamical systems, estimation od these models and their utilization for prediction.	The results are illus	strated on
practical tra	ansportation tasks. Mathematical theory roots from probability and mathematical statistics and they use the methods of the Bayesian	probabilistic appro	ach.
11TER	Game Theory and Optimal Decision-Making	ZK	2
•	heory, utility theory. Explicit form games, backward induction. Normal form games. Antagonistic conflict, matrix games. Repeated games.		
Cooperative game	es without transferable payoffs. Cooperative games with transferable payoffs (imputation, core, Shapley value, nucleolus). Application	s of game theory a	above all in
4.471.10.0	economics and transportation.	716	
11THRO	Queuing Theory	ZK	2
•	cess, definition, random distribution, and probability. Basic processes, process of revitalisation. Markov process, Markov models, Kendiels M/M/n. Non-markovian models, model M/C/n, models G/G/n. Models with continuous flow. Service net, examples of Petri net. Com		odel M/M/1
11XN4K	Seminar for Diploma Thesis	Z	8
11XNDM	Master Thesis for study programme LA	Z	18
12XN4K	Seminar for Diploma Thesis	Z	8
12XNDM	Master Thesis for study programme LA	Z	18
14BIG	Big Data	KZ	2
	duce. Basic Principles of Big Data Management. Comparison and Classification of NoSQL Databases. Key Database Value Database.		
Databases. Graph	Databases-Basic Principles. Graph Databases-Advanced Aspects. Indexing. Interpretation. Advanced Principles Big Data Manageme	ent. NewSQL Data	base. Cloud
	computing. Data warehouses and Big Data. Cloud computing. Data warehouses and Big Data. Other Big Data issues.		_
14GISS	Geographical Information Systems	KZ	2
	on of saving format of space-oriented information land-survey and cartography minimum basic tasks of spatial operations principles of		
14W2KI	Capital Investment in Transportation and Telecommunications	KZ	3
4.43/51.41/	Financial market, investment desicion making - long term goals and investment strategies, long term financing		
14XN4K	Seminar for Diploma Thesis	Z	8
14XNDM	Master Thesis for study programme LA	Z	18
15J2A1	Language - English 1	Z	2
	resentation Skills - expert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work		1
15J2F1	Language - French 1	Z	2
	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills,		_
technical text conte	ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec language of management.	onnicai registers ar	ia their use
15J2I1		7	2
	Language - Italian 1 ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills,	foodback skills, su	_
	ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec		
teerinear text cont	language of management.	All lical registers at	ia trion asc
15J2N1	Language - German 1	Z	2
	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills,	_	_
	ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec		
	language of management.	-	
15J2R1	Language - Russian 1	Z	2
Grammatical Struc	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills,	, feedback skills, si	ummarising
technical text conte	ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec	chnical registers an	nd their use
	language of management		

language of management.

15J2S1	Language - Spanish 1	Z	2
	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills,		1
	ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec- language of management.		- 1
15JBA2	Language - English 2	Z	2
	resentation Skills - expert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work	engagement.	1
15JBA3	Language - English 3	Z	2
Presentation Skill	s - expert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work engagement.Op FCE, CAE.	tional courses for o	certificates
15JBA4	Language - English 4	ZK	2
Presentation Skill	s - expert technical discourse and style; Analysis of expert texts and their production; Preparation for overseas work engagement.Op FCE, CAE.	tional courses for o	certificates
15JBF2	Language - French 2	Z	2
	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec language of management.		- 1
15JBF3	Language - French 3	7	2
	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	_	
and perceptive and	d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work v features. Practice of oral and written presentation.	with (professional)	text and its
15JBF4	Language - French 4	ZK	2
Grammar and styl	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	anguage structure	knowledge
and perceptive and	d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work v features. Practice of oral and written presentation.	with (professional)	text and its
15JBI2	Language - Italian 2	Z	2
	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and techniques. language of management.		٠ .
15JBI3	Language - Italian 3	7	2
	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	anguage structure	
	d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work v features. Practice of oral and written presentation.		
15JBI4	Language - Italian 4	ZK	2
Grammar and styl	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	anguage structure	knowledge
and perceptive and	d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work features. Practice of oral and written presentation.	with (professional)	text and its
. = . =			
15JBN2	Language - German 2	Z	2
Grammatical Struc	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills,	feedback skills, s	ummarising
Grammatical Struc	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and tec	feedback skills, s	ummarising
Grammatical Structechnical text conte	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and techniques. language of management.	feedback skills, so chnical registers ar	ummarising nd their use,
Grammatical Structechnical text conte	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and teclianguage of management. Language - German 3	feedback skills, so chnical registers are	ummarising and their use,
Grammatical Structechnical text contents 15JBN3 Grammar and styl	ctures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and techniques. language of management.	feedback skills, so shnical registers ar Z anguage structure	ummarising and their use, 2 knowledge
Grammatical Structechnical text contents 15JBN3 Grammar and styl	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and techniques of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work or the state of the st	feedback skills, so shnical registers ar Z anguage structure	ummarising and their use, 2 knowledge
Grammatical Structechnical text contectechnical text contectechnical text contected and style and perceptive and 15JBN4 Grammar and style	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and teclianguage of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of ladications are conversation and professional topics based on the language level and study focus at the Faculty. Improvement of ladications are conversation and professional topics based on the language level and study focus at the Faculty.	feedback skills, so thnical registers ar Z anguage structure with (professional) ZK anguage structure	ummarising nd their use, 2 knowledge text and its 2 knowledge
Grammatical Structechnical text contectechnical text contectechnical text contected and style and perceptive and 15JBN4 Grammar and style	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and technique of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of communicative skills, vocabulary development.	feedback skills, so thnical registers ar Z anguage structure with (professional) ZK anguage structure	ummarising nd their use, 2 knowledge text and its 2 knowledge
Grammatical Structechnical text contectechnical text contectechnical text contected and style and perceptive and style and perceptive and perceptive and perceptive and style and perceptive and style and perceptive and style an	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and teclianguage of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation.	feedback skills, significant registers are shrincal registers are significant and significant are significant as a significant and significant are significant as a significant as a significant are significant as a significant as a significant as a significant are significant as a significant as a significant as a significant as	ummarising nd their use, 2 knowledge text and its 2 knowledge text and its
Grammatical Structechnical text contectechnical text contectechnical text contectechnical text contectechnical text contected and perceptive and 15JBN4 Grammar and styll and perceptive and 15JBR2	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and teclianguage of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of led communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of led communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - Russian 2	feedback skills, sichnical registers are the control of the contro	ummarising nd their use, 2 knowledge text and its 2 knowledge text and its
Grammatical Structechnical text contectechnical text contectechnical text contected and style and perceptive and 15JBN4 Grammar and style and perceptive and 15JBR2 Grammatical Structechnical Structechnical Structechnical	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and teclianguage of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation.	feedback skills, sichnical registers are the control of the contro	ummarising nd their use, 2 knowledge text and its 2 knowledge text and its 2 ummarising
Grammatical Structechnical text contectechnical text contectechnical text contected and style and perceptive and 15JBN4 Grammar and style and perceptive and 15JBR2 Grammatical Structechnical Structechnical Structechnical	tures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and teclianguage of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of led communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of led communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - Russian 2 stures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and technique.	feedback skills, sichnical registers are the control of the contro	ummarising nd their use, 2 knowledge text and its 2 knowledge text and its 2 ummarising
Grammatical Structechnical text contection to the structure of the structu	Extures and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and techniques are already of the language of management. Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - German 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of lad communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work of features. Practice of oral and written presentation. Language - Russian 2 curres and Style. Selection of conversation topics relating to transportation sciences. Developing perceptive and communicative skills, ent, structuring presentations and meeting minutes, elementary rhetorics of foreign language and practical application, formal and techniques are graphical application, formal and technique	feedback skills, sichnical registers are supported by the control of the control	ummarising nd their use, 2 knowledge text and its 2 knowledge text and its 2 ummarising nd their use, 2 knowledge
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15W2HS			
-	Road Transport History	KZ	3
	ffic in the Ancient Age, corridors of main mediveal pathways. Development of road traffic in the modern period, acceleration of road		•
st part of 20th cent	ury. Development of road layout, geometric and construction layers. Beginning of modern road civil engineering. Development of road	ad travelling in mo	odern period
	History of road intercections, bridges and traffic control, development of road signs.		
15W2MS	Sociology for Managers	KZ	3
Sociological appro	ach to a corporation. Corporation and its organization. Corporation and its running - human role and communication. Corporation, i	ts culture and soc	cial system.
Hu	ıman's work position in free market economy. Corporate directorship, work groups, adaptation, strife, different roles and positions in	corporation.	
15W2OZ	Health Protection in Transportation and EU	KZ	3
	n transportation in CR in the past and present. Conditions before 1989 and after, current legislature, future prospects. Harmonisatio	n of legislation wi	th other EU
,	members. Fundamental principles of health protection and support in selected EU countries.	3	
15W2PT	Food in Transportation	KZ	3
	Interaction transportation and foodstuffs. The health risks. Hygienic safeguard. The practical examples from the Czech Republic and	1	_
The Huthtion policy.	dining cars, work trains and other railroad equipment. Legislation.	a nom the world.	i ile issues u
4.E.MOCD		1/7	
15W2SR	Stylistics and Rhetorics	KZ	3
	nd written expression as a means of human communication. Basic information about speech, articulation, oral and written language	• .	
	g. Language semantics, language syntactic and the pragmatic aspect. Creative thought and its oral and written expression. Practice -		
15W2TS	Technician and Contemporary Society	KZ	3
Vhy to take off a hat	t in a room and open a door for a lady, are there simple solutions, science vs belief, do we need to know or is it enough to turn on a	PC, it must be tru	e - it's on th
	Internet and in newspapers, what are the sights for, interest in public affairs - a hangover from the past?	ı	
15XN4K	Seminar for Diploma Thesis	Z	8
15XNDM	Master Thesis for study programme LA	Z	18
16XN4K	Seminar for Diploma Thesis	Z	8
16XNDM	Master Thesis for study programme LA	Z	18
17AMAK	Application of Marketing Tools in Transport Industry	KZ	2
	plans. Implementation of marketing campaigns. Branding and brand promotion. Multimedia presentations. Direct marketing and relations.	1	
17DOCH	Travel Behavior	KZ	3
-	sal effects in travel behavior research (quasi-experimental and experimental approaches). Data collection (theory of measurement;	-	
and data collection).	. Analysis and interpretation of data (advanced regression models; issues of analysis and interpretation of results: effect size, practi	cal vs. statistical s	significance)
	Analysis and interpr. of data (surveys, choice exp., panel. data).		
17DOPM	Transportation Planning and Modeling	Z,ZK	6
Basic steps and tool	ls used within four step model (trip generation, trip distribution, mode choice and trip distribution). Mobility and availability in urban a	reas, land use. N	ew trends fo
	transportation planning and modelling.		
17LSC	Logistics in Smart Cities	Z,ZK	6
Development of citie	s in time, city and region, mobility of city residents and movement of goods, sustainability as a concept, Smart Cities, city as a syste	em and its compo	nents, quality
of life, individual qual	ity of life, city "smartness" assessment, legislation in Smart Cities, Smart Cities transformation, last mile logistics, e-commerce, new a	nnroaches in last	
		pproductios irriast	mile logistics
	last mile logisitcs in cities and in regions.	pproderies irriast	mile logistics
17MADS	<u> </u>		_
17MADS	Management of Transport Systems	KZ	mile logistics
<u>'</u>	Management of Transport Systems Functions, processes and systems of management in transport, organisational structures, strategy, social responsibility, soft s	KZ kills.	2
17MID	Management of Transport Systems Functions, processes and systems of management in transport, organisational structures, strategy, social responsibility, soft s Managerial Information Systems in Transport	KZ kills. Z,ZK	2
17MID IT and their use in	Management of Transport Systems Functions, processes and systems of management in transport, organisational structures, strategy, social responsibility, soft s Managerial Information Systems in Transport building IS of modern transport company. New EU legislation on cyber security and data protection puts transport organizations in	KZ kills. Z,ZK front of new chall	2 3 enges. The
17MID IT and their use in	Management of Transport Systems Functions, processes and systems of management in transport, organisational structures, strategy, social responsibility, soft s Managerial Information Systems in Transport building IS of modern transport company. New EU legislation on cyber security and data protection puts transport organizations in the security of IS and possible sources of danger. The practical part deals with the process of building a new IS from the idea through	KZ kills. Z,ZK front of new chall	2 3 enges. The
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20TEL	Telecommunications	KZ	3
•	ew trends in telecommunications systems. Economical and legal aspects of telecommunications networks design and telecommunications	•	•
identification and qu	ıantification of hlererchical telecommunications networks and telecommunication services performance based on addopted performance p	arameters, teleco	mmunication
	services typically applied within transport and specifically logistic solutions.		,
20XN4K	Seminar for Diploma Thesis	Z	8
20XNDM	Master Thesis for study programme LA	Z	18
21KMDK	Quantitative Methods in Transport	Z,ZK	7
The course focuses	s on the issue of the use of undirected graphs tree type, planar graphs and their coloring. Further distribution problems, facility location	problems are for	mulated and
solved such as me	odels of integer linear programming. Besides the use of exact methods there are described simple and also more sofisticated heuristi	cs (metaheuristic	s) methods.
21TZOK	Inventory, Replacement and Scheduling Theory	Z,ZK	4
Inventory theory	- introduction, static models, deterministic dynamic models, stochastic dynamic models. Replacement theory - introduction, models for	or replacement of	items that
deteriorate with tim	e, models for replacement of items that fail completely. Scheduling theory - introduction, single machine scheduling problems, parallel i	machine scheduli	ng problems,
	flow shop scheduling problems and job shop scheduling problems.		
21W2CR	CRM	KZ	3
Introduction to CR	M. Analysis of air accidents. Human factor. Error. Historical development of CRM. Health and fitness. Stress and its effect on the human	an body. Fatigue S	Sleep &
Vigilance. I	nformation Processing. Situational Awareness. Workload Management. Decision Making. Communication. Leadership & Decision Making. Communication. Leadership & Decision Making. Communication.	ehaviour. Automa	tion.
21W2FM	Aviation Company Financial Management	KZ	3
Theories of corp	orate finance - financial statements, budget, forecast. Financial policy of the company. Financial resources - long-term financial resou	rces, depreciatior	n, retained
	earnings, shares, bonds, loans, leasing, capital. Financial and economic analysis of the company - structure and content.		
21W2MK	Marketing of Air Transport	KZ	3
Definition, purpose	, evolution, stages and types of marketing. Marketing in air transportation. Marketing research. Market segmentation. Airlines marketi	ng strategies. Airli	ne Products.
	Yield management and revenues. Air transport market sales.		
21W2PP	Law and Operation in Air Transport	KZ	3
Development of av	ation law. International conventions on civil aviation. International organisations and including of the CzechRepublic in these organis	ations. EU legisla	tion and civil
aviation. Executi	on of state administration and state supervision in matters of civil aviation, in accordance with Act No. 49/1997 Col. Facilitation. Resp	onsibilities of air o	arriers for
	passengers, luggage and cargo. The safe transport of dangerous goods.		
21XN4K	Seminar for Diploma Thesis	Z	8
21XNDM	Master Thesis for study programme LA	Z	18
22XN4K	Seminar for Diploma Thesis	Z	8
22XNDM	Master Thesis for study programme LA	7	18

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