Study plan

Name of study plan: KOMBI bak. studium od 21-22 (specializace LOG, ne obor)

Faculty/Institute/Others:

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch:

Program of study: Technology in Transportation and Telecommunications

Type of study: Bachelor combined

Required credits: 180 Elective courses credits: 0 Sum of credits in the plan: 180

Note on the plan:

Name of the block: Compulsory courses Minimal number of credits of the block: 162

The role of the block: Z

Code of the group: 1S K LOG 21-22 P

Name of the group: 1. sem. bak. KOMBI specializace LOG 21-22 povinné p edm ty (specializace LOG, ne

obor)

Requirement credits in the group: In this group you have to gain 30 credits

Requirement courses in the group: In this group you have to complete 10 courses

Credits in the group: 30 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
611CAL1	Calculus 1 Romana Zibnerová Ond ej Navrátil (Gar.)	Z,ZK	7	2P+4C+22E	Z	Z
611LA	Linear Algebra Romana Zibnerová Romana Zibnerová Martina Be vá ová (Gar.)	Z,ZK	3	2P+1C+10E	Z	Z
612ZYDK	Introduction to Transportation Engineering Dagmar Ko árková Dagmar Ko árková (Gar.)	Z,ZK	3	6B	Z	Z
618MTY	Materials Science and Engineering Vít Malinovský Jaroslav Valach (Gar.)	Z,ZK	3	2P+1C+10E	Z	Z
611GIE	Geometry Vít Malinovský Šárka Vorá ová (Gar.)	KZ	3	2P+2C+12E	Z	Z
614ASD	Algorithm and Data Structures Jan Mejst ik	KZ	3	0P+2C+8E	Z	Z
614KSP	Constructing with Computer Aid Libor Žídek	KZ	2	0P+2C+8E	Z	Z
618TED	Technical Documentation Vít Malinovský Jitka ezní ková (Gar.)	KZ	2	1P+1C+8E	Z	Z
615DPLG	Transportation Psychology Jana Štikarová	Z	2	2P+0C+6E	Z	Z
616UDOP	Introduction into Vehicles Zuzana Radová Petr Bouchner (Gar.)	Z	2	2P+0C+8E	Z	Z

Characteristics of the courses of this group of Study Plan: Code=1S K LOG 21-22 P Name=1. sem. bak. KOMBI specializace LOG 21-22 povinné p edm tv (specializace LOG, ne obor)

povinine p earn ty	(specializate EOC, lie obol)						
611CAL1	Calculus 1	Z,ZK	7				
Sequence of real numbers and its limit. Basic properties of mappings. Function of one real variable, its limit and derivative. Geometric properties of n-dimensional Euklidean space an							
Cartesian coordinate system. Geometric meaning of the differential of functions several real variables, differential calculus of functions of several real variables.							
611LA	Linear Algebra	Z,ZK	3				
Vector spaces (linear co	mbinations, linear independence, dimension, basis, coordinates). Matrices and operations. Systems of linear equations and	their solvability. D	eterminants and				
their applications. Scala	r product. Similarity of matrices (eigenvalues and eigenvectors). Quadratic forms and their classification.						
612ZYDK	Introduction to Transportation Engineering	Z,ZK	3				
Role of transportation in land-use planning. Basic terms in transportation engineering. Traffic survey and traffic prognosis. Introduction to topic of roads, public mass transport. Negative							
impacts of transportation to environment and safety.							

618MTY	Materials Science and Engineering	Z,ZK	3			
Basic course of material	s science and engineering explains mechanical properties of structural materials based on their bonding forces and microstru	cture. However th	e main attention			
is paid to metals as the	most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and c	omposites. Atten	ition is also paid			
to degradation processe	es in materials, to defectoscopy and to main mechanical tests.					
611GIE	Geometry	KZ	3			
	e projections, linear perspective. Topographic surfaces and their orthogonal projection. Differential geometry of curves - parallel		of the curve,			
torsion and curvature, F	renet`s trihedron. Kinematics - a curve as a trajectory of the motion, the velocity and acceleration of a particle moving on a cu	ırved path.				
614ASD	Algorithm and Data Structures	KZ	3			
Students will be familiari	zed with selected basic and derived data structures, algorithms, their properties and their design procedure. Students will analy	ze problems, pro	pose theoretical			
solutions to the set task	and the resulting algorithm write by means of flowcharts, practice in reading algorithms recorded by means of the flowchart a	and use the basic	s of Boolean			
algebra with forming the	conditions for the algorithms.					
614KSP	Constructing with Computer Aid	KZ	2			
"CAD systems" term de	termination. CAD role in projecting system model. Existing CAD systems on Czech market. Project creation, basic common w	ork rules in grap	hic applications			
and CA systems. Co-ord	dinated systems, CAD environment skill (basics of constructing, dimensioning, modifications, user interfaces, projecting possi	bilites, AutoCAD	environment			
profiles, drawings with ra	aster foundaments).					
618TED	Technical Documentation	KZ	2			
Technical standards, int	ernational standardization, technical drawings, representation of technical objects, technical diagrams and charts, dimensiona	al and geometrica	al accuracy,			
arrangement of drawing	sheets.					
615DPLG	Transportation Psychology	Z	2			
Subject of psychology a	nd its basic concepts. Information intake, decision-making and behaviour. Performance. Engineering psychology and vehicle co	nstruction. Psych	ological aspects			
of travel route and traffic conditions, accidents and traffic incidents. Selection and training of the staff. Work and leisure. Age as a factor in transport operation.						
616UDOP	Introduction into Vehicles	Z	2			
Vehicles and transportation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water transport. Alternative means						
of transport. Lifting equi	pment and conveyors. Legislation.					

Code of the group: 2S K LOG 21-22 P

Name of the group: 2. sem. bak. KOMBI specializace LOG 21-22 povinné p edm ty (specializace LOG, ne obor)

Requirement credits in the group: In this group you have to gain 30 credits

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

Credits in the group: 30

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
611CAL2	Calculus 2 Romana Zibnerová Romana Zibnerová Ond ej Navrátil (Gar.)	Z,ZK	5	2P+3C+20E	B L	Z
611STAT	Statistics Pavel Provinský, Pavla Pecherková Pavla Pecherková Pavel Provinský (Gar.)	Z,ZK	4	2P+2C+12E	L	Z
612ZTS	Railway Lines and Stations Tomáš Javo ík, Ond ej Trešl	Z,ZK	4	2P+2C+10E	B L	Z
618SAT	Structural Analysis Tomáš Doktor Daniel Kytý (Gar.)	Z,ZK	4	2P+2C+14E	B L	Z
620SYSA	Systems Analysis Petr Bureš, Ji í R ži ka Zuzana B linová (Gar.)	Z,ZK	5	2P+2C+14E	B L	Z
614PRG	Programming Libor Žídek	KZ	2	0P+2C+8E	L L	Z
617TEDK	Transport Technology and Logistics Michal Drábek Vít Janoš (Gar.)	KZ	4	12B	L	Z
621ZALD	Basics of Air Transport Jakub Hospodka	KZ	2	0P+2C+8E	B L	Z

611CAL2	Calculus 2	Z,ZK	5
Antiderivative, Newto	nian integral, Riemannian integral of the function of one variable, improper Riemannian integral, Riemannian integral in Rn. Pai	rametric description	n of regular
k-dimensional surface	es in Rn, Riemannian integral over regular surfaces. Line and surface integrals of the second type, Stokes theorems, ordinary d	lifferential equation	ns of the first
order, linear differenti	al equations with constant coefficients and its systems.		
611STAT	Statistics	Z,ZK	4
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Definition of probability	y, random variable and its description, known distributions, random vector, function of random variable. Methods of point estimatic	on. Testing of statis	tical hypothesis
•	y, random variable and its description, known distributions, random vector, function of random variable. Methods of point estimatio lation, linear regression, correlation coefficient, coefficient of determination, the general linear model, statistical inference in linea	•	
Regression and corre		•	
Regression and corremultiple regression, the	lation, linear regression, correlation coefficient, coefficient of determination, the general linear model, statistical inference in linear	•	
Regression and corremultiple regression, the 612ZTS	lation, linear regression, correlation coefficient, coefficient of determination, the general linear model, statistical inference in linear use of matrices in regression.	ar regression, anal	ysis of variance
Regression and corremultiple regression, the 612ZTS Rail transport. Railwa	lation, linear regression, correlation coefficient, coefficient of determination, the general linear model, statistical inference in linear euse of matrices in regression. Railway Lines and Stations	ar regression, anal	ysis of variance
Regression and corremultiple regression, the 612ZTS Rail transport. Railwa	lation, linear regression, correlation coefficient, coefficient of determination, the general linear model, statistical inference in linear e use of matrices in regression. Railway Lines and Stations y track geometry parameters. Route layout of railway lines. Railway line construction - railway substructure and superstructure.	ar regression, anal	ysis of variance

Systems Analysis 620SYSA Introduction to system sciences, system viewpoint, terminology, typical system analysis tasks, system identification, system interface and interface tasks, processes, system behaviour and its analysis, strong functions and processes, genetic code, system identity, system architecture. Tools for system analysis - Petri nets, decision tables, algorithms for structural tasks. Soft and hard systems, methods for soft system analysis **Programming** Algorithm development, methods of structured programming, high-level programming languages, basics of C programming languages (types, variables, conditions, cycles, arrays, functions), programming techniques, complexity. 617TEDK Transport Technology and Logistics Basic terms in transport technology and logistics, particular steps of transport planning, line planning, timetabling, planning in pasanger and freight transport, organisation of traffic in each transport modus, technologic factors of the side of operator and client, organisation of city transport, logistic technologies and their aplication using various transport modus. Basics of Air Transport History, definitions, terminology, basic rules. VFR/IFR. Basics of aerodynamics. Propulsion of aircraft. Aircraft design. Basics of navigation, radio navigation. Weight, balance, performance. Flight planning, optimization of speed and heights, minimum fuel. Limitations of operation, maintenance, service life of aircraft. Traffic management, ground handling, security. Air crew. Airlines and economics. Space technologies.

Code of the group: 3S K LOG 22-23 P

Name of the group: 3. sem. bak. KOMBI specializace LOG 22-23 povinné p edm ty

Requirement credits in the group: In this group you have to gain 30 credits

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

Credits in the group: 30 Note on the group:

Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their Code Completion Credits | Scope | Semester Role members) Tutors, authors and guarantors (gar.) **Physics** 611FYZ Z,ZK Ζ 2P+2C+18B Z Goce Chadzitaskos Zuzana Malá (Gar.) **Transport Models and Transport Excesses** 612MDE Z,ZK 3 2P+1C+8B Ζ 7 Josef Kocourek, Tomáš Pad lek Josef Kocourek (Gar.) **Graph Theory and its Applications in Transport** 617TGA Z,ZK 7 4 2P+2C+12B Ζ Alexandra Dvo á ková Denisa Mocková (Gar., **Elasticity and Strength** Ζ 618PZP Z,ZK 2P+1C+10B 3 Ζ Tomáš Doktor Ond ej Jiroušek (Gar.) Introduction to Intelligent Transport Systems 7 **620UITS** Ζ Z,ZK 3P+2C+20B Ζ Vladimír Faltus Pavel Hrubeš (Gar.) **Designing Roads, Highways and Motorways** 612PPOK ΚZ 3 Ζ 1P+2C+10B Z Tomáš Pad lek, Petr Kumpošt **Database Systems 614DATS** 2 Ζ ΚZ 1P+1C+10B Ζ Ond ej Smíšek Jana Kaliková (Gar.) Foreign Language - English 1 615JZ1A Ζ 3 0P+4C+10B Ζ Ζ

Characteristics of the courses of this group of Study Plan: Code=3S K LOG 22-23 P Name=3. sem. bak. KOMBI specializace LOG 22-23 povinné p edm ty

povinné p edm	ty		
611FYZ	Physics	Z,ZK	5
Kinematics, particle	dynamics, dynamics of particle systems and rigid body. Continuum mechanics, thermodynamics.		
612MDE	Transport Models and Transport Excesses	Z,ZK	3
Parameters of the tr	affic flow and methods for their measurement. Models of the traffic flow, communications load, line and urban systems. Theory	of queues, shock w	vaves. Quality o
transport and its ass	essment. Statistical characteristics of transport. Transport excesses, their analysis, the causes, identify and minimize the cons	equences. Improvin	g of transport
safety and fluency.			
617TGA	Graph Theory and its Applications in Transport	Z,ZK	4
Basic terms of graph	theory, paths in graphs, flows in networks, location problems, design problems on graphs, optimum routing, use of graphs in	other scientific disci	plines.
618PZP	Elasticity and Strength	Z,ZK	3
Tension and compre	ssion. Bending of beam. Shear stress during bending of beam. Design and analysis of cross section of beam. Design of riveted,	bolted and welded j	joint of structure
Analysis of deflection	n curve of beam. Torsion of circle cross section. Combined loading. Stability of compressed bar and buckling. Beam on elastic	foundation. Strength	h analysis.
620UITS	Introduction to Intelligent Transport Systems	Z,ZK	7
Terminology and leg	slative framework telematics systems and their architecture. Telematics systems in practice and their operation. Fundamentals of	information and tel	ecommunication
systems for ITS. Prin	iciples and technical support measurement of traffic data, localization and navigation. Practical work with traffic data. Real exar	nples of possible ap	oplications of th
principles of ITS.			
612PPOK	Designing Roads, Highways and Motorways	KZ	3
Definition, types, ow	nership, maintenance, management and categorization of roads and highways. Curve and transition curve. Sinuosity and stan	dard speed. Route i	in rural areas.
Range of vision for s	topping and overtaking. Road body - shapes and proportions, bottom and superstructure. Drainage and components of roads.	Safety device. Cros	sings, junctions
intersections.			
614DATS	Database Systems	KZ	2
Basic concepts of da	atabase systems, conceptual model, relational data model, the principles of normal forms, relational database design, security	and integrity of dat	a, database
queries, relational a	gebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via the WWW.		
615JZ1A	Foreign Language - English 1	Z	3
Grammatical structu	res and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive an	nd communicative s	kills. Elementar
stylistics forms. Oral	and written presentation of original research. Academic text principles and reading comprehension. Principles of rhetoric.		

Code of the group: 4S K LOG 22-23 P

Name of the group: 4. sem. bak. KOMBI specializace LOG 22-23 povinné p edm ty

Requirement credits in the group: In this group you have to gain 26 credits

Requirement courses in the group: In this group you have to complete 7 courses

Credits in the group: 26 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
611MSP	Modeling of Systems and Processes Jana Kuklová, Bohumil Ková Bohumil Ková (Gar.)	Z,ZK	4	2P+2C+12E	B L	Z
617ESYS	Transport Systems Economy Alexandra Dvo á ková Veronika Faifrová (Gar.)	Z,ZK	6	3P+2C+18E	B L	Z
617LGT	Logistics Daniel Pilát Tomáš Horák (Gar.)	Z,ZK	6	3P+2C+18E	B L	Z
617MDP	Transport prognostic methods Alena Rybi ková Alena Rybi ková (Gar.)	KZ	2	2P+0C+10E	B L	Z
611LP	Linear Programming Šárka Vorá ová, Ivan Nagy Ivan Nagy Šárka Vorá ová (Gar.)	KZ	3	2P+1C+12E	B L	Z
616DPO	Vehicle Technology Josef Mik Josef Mik (Gar.)	KZ	2	2P+0C+10E	L	Z
615JZ2A	Foreign Language - English 2 V ra Pastorková, Jan Feit	Z,ZK	3	0P+4C+10E	B L	Z

Characteristics of the courses of this group of Study Plan: Code=4S K LOG 22-23 P Name=4. sem. bak. KOMBI specializace LOG 22-23 povinné n edm tv

System and subsystem, external and internal system description, continuous and discrete system, mathematics as a tool, examples of formulation of differential equations. Linear and nonlinear system, stationary and non-stationary system, causality. Convolutional integral. Laplace and Z transformations. Transfer function. Stability of LTI systems. Discretization of continuous systems. System interconnection. 617ESYS Transport Systems Economy Z,ZK 6 Macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its quantification, rationalization of transport system. 617LGT Logistics Z,ZK 6 Logistics definition, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods	povinné p edm t	у		
Linear and nonlinear system, stationary and non-stationary system, causality. Convolutional integral. Laplace and Z transformations. Transfer function. Stability of LTI systems. Discretization of continuous systems. System interconnection. 617ESYS Transport Systems Economy Z,ZK 6 Macroeconomics, macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its quantification, rationalization of transport system. 617LGT Logistics Logistics Logistics Concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods KZ 2 The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology KZ 2 Vehicle Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	611MSP	Modeling of Systems and Processes	Z,ZK	4
Discretization of continuous systems. System interconnection. 617ESYS Transport Systems Economy Macroeconomics, macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its quantification, rationalization of transport system. 617LGT Logistics Logistics Logistics concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods KZ 2 The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. 616DPO Vehicle Technology Vehicle Technology Vehicle Technology Vehicle Technology Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	System and subsysten	, external and internal system description, continuous and discrete system, mathematics as a tool, examples of formulation of diffe	erential and differ	ential equations.
Transport Systems Economy Macroeconomics, macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its quantification, rationalization of transport system. 617LGT Logistics Logistics Logistics Logistics definition, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. 616DPO Vehicle Technology Vehicle Technology Vehicle Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	Linear and nonlinear s	ystem, stationary and non-stationary system, causality. Convolutional integral. Laplace and Z transformations. Transfer function	. Stability of LTI s	systems.
Macroeconomics, macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its quantification, rationalization of transport system. 617LGT Logistics Logistics Logistics definition, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods KZ 2 The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. 616DPO Vehicle Technology KZ 2 Vehicle. Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	Discretization of contin	uous systems. System interconnection.		
of transport system. 617LGT Logistics Logistics definition, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods KZ 2 The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology Vehicle. Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	617ESYS	Transport Systems Economy	Z,ZK	6
Logistics Logistics Logistics Logistics Logistics definition, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. Transport prognostic methods Transport pro	Macroeconomics, mad	roeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and	d its quantification	n, rationalization
Logistics definition, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelligent logistics systems, logistics city. 617MDP Transport prognostic methods KZ 2 The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology Vehicle Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	of transport system.			
617MDP Transport prognostic methods The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology Vehicle. Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	617LGT	Logistics	Z,ZK	6
Transport prognostic methods The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. Linear Programming KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. KZ 3 Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. KZ 2 Vehicle Technology Vehicle Technology Vehicle. Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	Logistics definition, ba	sic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intelli	gent logistics sys	stems, logistics
The techniques of economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical values using differencies and indices. 611LP Linear Programming Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology KZ 2 Vehicle. Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	city.			
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Einear Programming KZ 3	The techniques of eco	nomical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statisti	cal values using	differencies and
Formulation of the problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex polyedra. Simplex method, basic solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology Vehicle Dive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	indices.			
solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem. 616DPO Vehicle Technology Vehicle Technology Vehicle Survey duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	611LP	Linear Programming	KZ	3
Vehicle Technology Vehicle Technology Vehicle Technology Vehicle Enunctions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	Formulation of the pro	olem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex	polyedra. Simple	x method, basic
Vehicle. Functions, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage design. Drive. Electric traction. Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Z,ZK 3 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	solutions, duality princ	iple in linear programming, stability of solution of linear programming problem. Traffic problem.		
Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Safety. 615JZ2A Foreign Language - English 2 Z,ZK 3 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	616DPO	Vehicle Technology	KZ	2
Foreign Language - English 2 Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	Vehicle. Functions, pri	nciples. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage	design. Drive. El	lectric traction.
Grammatical structures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary	Transshipment. Techno	ological components of various modes of transport. Management and control of various means of transport. Safety.		
	615JZ2A	Foreign Language - English 2	Z,ZK	3
stylistics forms. Oral and written presentation of original research. Academic text principles and reading comprehension. Principles of rhetoric.	Grammatical structure	s and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and	communicative s	kills. Elementary
	stylistics forms. Oral a	nd written presentation of original research. Academic text principles and reading comprehension. Principles of rhetoric.		

Code of the group: 5S K LOG 23-24 P

Name of the group: 5. sem. bak. KOMBI specializace LOG 23-24 povinné p edm ty

Requirement credits in the group: In this group you have to gain 23 credits

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

Credits in the group: 23

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
612ZPV	Railway Operation Martin Jacura Martin Jacura (Gar.)	Z,ZK	4	2P+1C+12B	Z	Z
617EPOD	Economics of Transport Company Alexandra Dvo á ková Veronika Faifrová (Gar.)	Z,ZK	6	4P+2C+18B	Z	Z
617TVD	Technology of Public Transport Michal Drábek Vít Janoš (Gar.)	Z,ZK	5	2P+2C+18B	Z	Z
614DMG	Datamining Ond ej Smíšek	KZ	2	0P+2C+10B	Z	Z

617MAGD	Marketing Transport Alexandra Dvo á ková Petra Skolilová (Gar.)	KZ	4	2P+1C+12B	Z	Z
623ZAP	Basics of Law Milena Macková	Z	2	2P+0C+10B	Z	Z

Characteristics of the courses of this group of Study Plan: Code=5S K LOG 23-24 P Name=5. sem. bak. KOMBI specializace LOG 23-24 povinné p edm ty

Z,ZK 612ZPV Railway Operation Legislation in railway transport. Railway vehicles. Railway signals and signal devices. Railway traffic organisation and operation. Simplified railway traffic operation. Railway vehicles brakes. Railway vehicles marking. Operation intervals. Theoretical graph of train running.

Economics of Transport Company

Z,ZK

Economy, marginal utility, marginal costs, function of supply and demand, market equilibrium, perfect competition and types of market arrangement. Transportation market, transport company, it's environment, balance sheet, costs, revenue, profit and maximalization of profit. Business plan, taxation in transport

Technology of Public Transport

6

The course contents a detailed description of new knowledge and basic principles of hierarchical planning of public transport system accenting the general transport planning and quantified transport demand. The course would be oriented on multiple and multi-level optimisation of passenger public transport system.

614DMG Datamining ΚZ

2

Types of data sources and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisition systems for data mining, mining characteristics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesian cob., using neural networks). Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www.

617MAGD Marketing Transport K7

Development of strategic marketing plans, Implementation of marketing campaigns, Branding and brand promotion, Public relations - industry, business and vertical market, Website development, search engine optimization, Government relations and industry organization lobbying, Advertising and strategic sponsorships, Multimedia presentations and corporate videos, Direct marketing and related lead generation campaigns

623ZAP Basics of Law

Basic orientation in the Czech legal system. The course is primarily intended to provide students with orientation in fundamentals of the Czech Republic, legal system and in various forms of law, including adoption of the basic principles of European Community law. The course consists of selected chapters from the public and private law and European Community

Code of the group: 6S K LOG 23-24 P

Name of the group: 6. sem. bak. KOMBI specializace LOG 23-24 povinné p edm ty

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 8 courses

Credits in the group: 22

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
617FID	Financing and investment in transport Alexandra Dvo á ková Olga Mertlová (Gar.)	Z,ZK	4	2P+1C+12B	L	Z
617IVED	Integration of Public Transport Roman Št rba Roman Št rba (Gar.)	Z,ZK	3	2P+1C+10B	L	Z
617KLID	Quality in transport service Pavel Edvard Van ura Pavel Edvard Van ura (Gar.)	Z,ZK	3	2P+1C+10B	L	Z
617MRRK	Managerial Decision-making and Management Alexandra Dvo á ková Alexandra Dvo á ková (Gar.)	Z,ZK	3	10B	L	Z
614MPG	Modern Programming Approaches	KZ	2	0P+2C+8B	L	Z
617GEDS	Geography of Transport Systems	KZ	2	2P+0C+8B	L	Z
612ZAR	Introduction to Architectural Design Petr ervenka, Jana Kumpoštová	Z	3	2P+0C+8B	L	Z
617NAPR	Freight Traffic Roman Št rba Roman Št rba (Gar.)	Z	2	2P+0C+8B	L	Z

Characteristics of the courses of this group of Study Plan: Code=6S K LOG 23-24 P Name=6. sem. bak. KOMBI specializace LOG 23-24 povinné p edm ty

617FID	Financing and investment in transport	∠,∠K	4				
Sources of financing of transport infrastructure, the role of public administration in the financing and realization of investment in transport, the investment project cycle, subsidy							
programs and their rules, competition, effectiveness and efficiency of spending public funds, evaluation systems of public projects and programs.							

Integration of Public Transport Transport policy of both EU and CR, transport sectoral strategies, land use planning and evolution of space organization, integration of public service in territory, forms and content of

operations, grading and quality, IS, marketing.

617KLID

activities and organizational structures of integrated public transport systems, internal and external bindings, contracting, carriage relations, conditions of both rail and bus transport

General interpretation of quality, standards and international standardization, integrated management systems, modern attitudes of quality management, quality in transport service and logistics, methods of quality measurement, quality management, risks and opportunities, public transport quality, view of costumers, carriers and PT-organizers, quality standards, quality costs, marketing and costumer satisfaction.

617MRRK Managerial Decision-making and Management

Quality in transport service

Z.ZK

Decision-making process; identifying exactly what the problem is; evaluating the issue; solving the issue; using multiple perspective analysis to make a decision; usual method of thinking.

614MPG	Modern Programming Approaches	KZ	2
Principles of object orie	nted programming, polymorphism, references, memory allocation, inheritage, generic programming, operator overloading, S	TL library, object i	mplementation
of abstract data types,	graph and graph algorithm implementation focused on logistic problems.		
617GEDS	Geography of Transport Systems	KZ	2
Regional differentiation	of the transport system. Sociogeographic regionalization and its relation to transport. Transport and local and regional develor	ppment. Spatial in	teraction -
theoretical and method	ological framework. Mobility research - travel behavior, mode choice and the influence onto "modal-split." Modal competition. Pra	ctical use of transp	ort-geographical
analysis in transportati	on planning.		
612ZAR	Introduction to Architectural Design	Z	3
Urbanism and architec	ure of traffic systems. Bus and trolley-bus transport. Tramway and town tracks. Design of vehicles. Subway. Railway transport	. Railway stations	Local
communications. Interr	ational airports.		
617NAPR	Freight Traffic	Z	2
Freight traffic and trans	portation system, conditions of implementation, forwarding.		·

Code of the group: SBP BAK K LOG 22-23

Name of the group: Seminá k bak. práci specializace LOG kombi (od) 22/23 Requirement credits in the group: In this group you have to gain 1 credit

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

Credits in the group: 1 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
611XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
612XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
614XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
615XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
616XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
623XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
618XBBP	Bachelor Thesis Seminar Daniel Pilát	Z	1	6B	L	Z
620XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
621XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
622XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z
617XBBP	Bachelor Thesis Seminar	Z	1	6B	L	Z

Characteristics of the courses of this group of Study Plan: Code=SBP BAK K LOG 22-23 Name=Seminá k bak. práci specializace LOG kombi (od) 22/23

611XBBP	Bachelor Thesis Seminar	Z	1
612XBBP	Bachelor Thesis Seminar	Z	1
614XBBP	Bachelor Thesis Seminar	Z	1
615XBBP	Bachelor Thesis Seminar	Z	1
616XBBP	Bachelor Thesis Seminar	Z	1
623XBBP	Bachelor Thesis Seminar	Z	1
618XBBP	Bachelor Thesis Seminar	Z	1
620XBBP	Bachelor Thesis Seminar	Z	1
621XBBP	Bachelor Thesis Seminar	Z	1
622XBBP	Bachelor Thesis Seminar	Z	1
617XBBP	Bachelor Thesis Seminar	Z	1

Name of the block: Compulsory elective courses

Minimal number of credits of the block: 12

The role of the block: PV

Code of the group: PVP KOMBI LOG 22-23

Name of the group: PVP pro bak. KOMBI 22-23 pro specializaci LOG (B1041A040001)

Requirement credits in the group: In this group you have to gain 12 credits

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

Credits in the group: 12 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
615W1BO	Work Safety and Health Protection in Transportation Petr Musil	KZ	4	8B	L	PV
621W1BS	Unmanned aircraft systems 1 Jakub Kraus	KZ	4	8B	L	PV
617W1EV	Public Sector Economy	KZ	4	8B	Z	PV
614W1HW	Computer Hardware	KZ	4	8B	L	PV
615W1HE	Work Hygiene and Ergonomics in Traffic	KZ	4	8B	Z	PV
617W1LL	Logistics of Passenger and Freight Air Transportation	KZ	4	8B	L	PV
617W1MD	Marketing in Transportation	KZ	4	8B	Z	PV
621W1MP	Matlab for project-oriented study	KZ	4	8B	Z	PV
621W1OH	Airline Business and Operations Slobodan Stoji	KZ	4	8B	Z	PV
617W1OF	Personal Finance Alexandra Dvo á ková	KZ	4	8B	Z	PV
617W1PM	Personnel Management Stanislava Holíková	KZ	4	8B	L	PV
614W1PZ	Advanced Data Processing in Spreadsheets	KZ	4	8B	Z	PV
614W1PJ	C Programming Language	KZ	4	8B	Z	PV
616W1PV	Operation, Construction and Maintenance of Vehicles	KZ	4	8B	L	PV
621W1RZ	Human Resources Management Šárka Václavíková	KZ	4	8B	L	PV
617W1ST	Titan Simulation	KZ	4	8B	L	PV
617W1SL	Sociology of Human Resources Stanislava Holíková	KZ	4	8B	Z	PV
617W1SK	Urban and Regional Rail Transport Systems	KZ	4	8B	L	PV
621W1TH	Aircraft Technical Handling	KZ	4	8B	Z	PV
614W1UP	Editing of Theses in MS Word	KZ	4	8B	L	PV

Characteristics of the courses of this group of Study Plan: Code=PVP KOMBI LOG 22-23 Name=PVP pro bak. KOMBI 22-23 pro specializaci LOG (B1041A040001)

specializaci LOG (B1041A040001)		
615W1BO Work Safety and Health Protection in Transportation	KZ	4
Fundamental legislative, definition of terms, risks and possible health damage, working conditions and health protection with focus on transpo	ortation. Health protection	n programmes,
health insurance of home and foreign business trips, statistics, working practice.		
621W1BS Unmanned aircraft systems 1	KZ	4
Unmanned Aviation Development. Aircraft design. Legislation in force in the Czech Republic. Planning and execution of the flight. Airspace div	rision. Operational risks	and operational
procedures. Practical flights.		
617W1EV Public Sector Economy	KZ	4
Economic and financial theory of public sector, public choice theory, externalites, decisions about public finance allocation, economic assesm	ent of public projects (Cf	BA, MCA, CEA),
tax system of the CR, state budget, management of public projects a their economic efficiency assessment, way of elaboration of PPP projects,	funding from EU funds,	program HDM-4.
614W1HW Computer Hardware	KZ	4
Computer architecture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and se	1 1	controllers,
arithmetic and logical units, I/O subsystem.		,
615W1HE Work Hygiene and Ergonomics in Traffic	KZ	4
Basic knowledge of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of		n of workers.
Creation and protection of working conditions that do not damage public health. Mutual links man-machine-environment. Adaptation of technology		
Practical examples from the field of transportation; relevant legislative.		
617W1LL Logistics of Passenger and Freight Air Transportation	KZ	4
Logistics airline passenger and cargo. Aircraft and airport terminals for passenger and cargo transport. Airlines in terms of logistics systems.	Aerial transport process	passengers and
air cargo. Information systems in air transport. Global distribution systems.		
617W1MD Marketing in Transportation	KZ	4
General principles of marketing applied to transport issues, marketing tools suitable for transport as a service, specifics of public passenger tr	ransport and the resultin	g differences in
the application of marketing.		
621W1MP Matlab for project-oriented study	KZ	4
The subject's syllabus is focused on the problem-solving during bachelor's thesis preparation and it is based on students' requests. Individual	exercises will be prepar	ed according to
particular examples, based on actual students' needs and suggestions. The subject will have a flexible form, which is expected to bring an important particular examples, based on actual students' needs and suggestions.	provement of students' N	fatlab skills.
621W1OH Airline Business and Operations	KZ	4
The course provides a comprehensive view of the commercial, operational and transportation activities of air transport companies. It focuses on t	he organizational structu	re of companies.
various aspects of their strategy, economic and operational indicators. It introduces students in detail to operational processes and the essentia	Is of transportation proce	esses. It provides
a basic view of the economic aspects of air transport.		•
617W1OF Personal Finance	KZ	4
Personal finance (budget, financing of basic living needs), debt (loans and credits, payment instruments, interest and fees, debt trap), financing	ng of housing (rent, mort	gage, savings,
consumer loans, refinancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suita	ability and adequacy), se	curing the future
(retirement savings and insurance).		
617W1PM Personnel Management	KZ	4
Human sources, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, i		ion.

614W1PZ Advanced Data Processing in Spreadsheets Students will be familiar with principles of working in a spreadsheet. Graphic layout of the table appearance, formatting of numbers, insertion of formulas and functions, including addressing, error detection. Working with large spreadsheets, filters, advanced filters, database functions. Pivot tables and charts, conditional formatting, solution finding, solver, macros, data analysis. Examples and questions from various companies and training. C Programming Language C programming language. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, string, files, structures and unions. Implementations of abstract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. 616W1PV Operation, Construction and Maintenance of Vehicles ΚZ Methods of vehicle production. Vehicle maintenance. Vehicle diagnostics. Maintenence and repair plans. Engine maintenance and emission measurement. Transmission mechanism. General principles of engine diagnostics. 621W1RZ Human Resources Management K7 The position of human resources in the organization and related disciplines file. Substance, importance and challenges of human resources management. Internal and external environment of human resource management. Human resource planning. Search, recruitment and selection of employees. Motivation, evaluation and remuneration of staff. Positioning, dismissal and redundancies of employees. Education of employees. Planning career management. 617W1ST Titan Simulation Titan is a management game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same product. Students set a price and determine the quantity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of their decisions by the form of financial corporate reports and they use this information for other business decisions. 617W1SL Sociology of Human Resources ΚZ Human resources and their importance, work group as a special kind of social group, communication, personal management, modern management, human resources planning, culture of the organization. Urban and Regional Rail Transport Systems 617W1SK Factors affecting transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line networking. Creating and evaluation of the timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport preferences. The role of marketing. 621W1TH Aircraft Technical Handling ΚZ Aircraft towing and pushing tractors. GPU. Air conditioning and heating units. Aircraft fuel equipment. De-acing and anti-icing units. Loading and unloading units. Equipment for passangers onboarding and offboarding. Operational processes of aircraft technical handling and regulations. Modernization and technical progress. 614W1UP Editing of Theses in MS Word K7 Students will be introduced to the principles of creating and editing large documents and basic typographic rules. They will properly apply styles, create tables of contents, lists of

figures, tables, graphs, etc. Footnotes, captions, index. They practice corrections of finished documents. The goal is to prepare students for seamless editing dissertations and theses,

so that they are able to concentrate mainly on writing a thesis.

Name of the block: Jazyky

Minimal number of credits of the block: 6

The role of the block: J

Code of the group: J 2 K (5.-6.SEM)

Name of the group: Jazyky KOMBI bak. pro 5. a 6. sem. (2.cizí jazyk) - pro B1041A040001

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 2 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
615JZ3F	Foreign Language - French 3	Z	3	0P+4C+10E	Z	J
615JZ3I	Foreign Language - Italian 3	Z	3	0P+4C+10E	B Z	J
615JZ3N	Foreign Language - German 3 René Skalický	Z	3	0P+4C+10E	3 Z	J
615JZ3R	Foreign Language - Russian 3 Vilma Gottwaldová	Z	3	0P+4C+10E	B Z	J
615JZ3S	Foreign Language - Spanish 3	Z	3	0P+4C+10E	Z	J
615JZ4F	Foreign Language - French 4	Z,ZK	3	0P+4C+10E	L L	J
615JZ4I	Foreign Language - Italian 4	Z,ZK	3	0P+4C+10E	L L	J
615JZ4N	Foreign Language - German 4 René Skalický, Sv tlana Petrová, Eva Rezlerová	Z,ZK	3	0P+4C+10E	L	J
615JZ4R	Foreign Language - Russian 4 Vilma Gottwaldová	Z,ZK	3	0P+4C+10E	L L	J
615JZ4S	Foreign Language - Spanish 4	Z,ZK	3	0P+4C+10E	B L	J

Characteristics of the courses of this group of Study Plan: Code=J 2 K (5.-6.SEM) Name=Jazyky KOMBI bak. pro 5. a 6. sem. (2.cizí jazyk) - pro B1041A040001

615JZ3F Foreign Language - French 3	Z	3
Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro	ovement of language struc	ture knowledge
and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written	form. Work with (profession	nal) text and its
features. Practice of oral and written presentation.		
615JZ3I Foreign Language - Italian 3	Z	3
Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro	ovement of language struc	ture knowledge
and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written to	form. Work with (profession	onal) text and its
features. Practice of oral and written presentation.		
615JZ3N Foreign Language - German 3	Z	3
Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro	ovement of language struc	ture knowledge
and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written t	form. Work with (profession	onal) text and its
features. Practice of oral and written presentation.		
615JZ3R Foreign Language - Russian 3	Z	3
Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro	ovement of language struc	ture knowledge
and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written t	form. Work with (profession	onal) text and its
features. Practice of oral and written presentation.		
615JZ3S Foreign Language - Spanish 3	Z	3
Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro	ovement of language struc	ture knowledge
and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written l	form. Work with (profession	nal) text and its
	VI	,
features. Practice of oral and written presentation.		
features. Practice of oral and written presentation. 615JZ4F Foreign Language - French 4	Z,ZK	3
615JZ4F Foreign Language - French 4	Z,ZK	3
615JZ4F Foreign Language - French 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro	Z,ZK	3
615JZ4F Foreign Language - French 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improand perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written to	Z,ZK	3
Foreign Language - French 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improand perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written features. Practice of oral and written presentation.	Z,ZK	3
Foreign Language - French 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improper and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written features. Practice of oral and written presentation. Foreign Language - Italian 4	Z,ZK ovement of language structorm. Work with (profession Z,ZK	3 sture knowledge anal) text and its
Foreign Language - French 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro- and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written leatures. Practice of oral and written presentation. Foreign Language - Italian 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro-	Z,ZK evement of language structorm. Work with (profession Z,ZK evement of language structory	3 sture knowledge enal) text and its 3 sture knowledge
Foreign Language - French 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written features. Practice of oral and written presentation. Foreign Language - Italian 4 Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Impro and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written to the language level and study focus at the Faculty.	Z,ZK evement of language structorm. Work with (profession Z,ZK evement of language structory	3 sture knowledge enal) text and its 3 sture knowledge
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List of courses of this pass:

Code	Name of the course	Completion	Credits
611CAL1	Calculus 1	Z,ZK	7
Sequence of real n	. umbers and its limit. Basic properties of mappings. Function of one real variable, its limit and derivative. Geometric properties of n-dim	nensional Euklidea	n space and
Cartesi	an coordinate system. Geometric meaning of the differential of functions several real variables, differential calculus of functions of sev	veral real variables	
611CAL2	Calculus 2	Z,ZK	5
	ewtonian integral, Riemannian integral of the function of one variable, improper Riemannian integral, Riemannian integral in Rn. Para	•	•
k-dimensional su	rfaces in Rn, Riemannian integral over regular surfaces. Line and surface integrals of the second type, Stokes theorems, ordinary diff	erential equations	of the first
	order, linear differential equations with constant coefficients and its systems.		•
611FYZ	Physics	Z,ZK	5
	Kinematics, particle dynamics, dynamics of particle systems and rigid body. Continuum mechanics, thermodynamics.		
611GIE	Geometry	KZ	3
Orthographic and	doblique projections, linear perspective. Topographic surfaces and their orthogonal projection. Differential geometry of curves - param	neterization, arc of	the curve,
torsion	and curvature, Frenet's trihedron. Kinematics - a curve as a trajectory of the motion, the velocity and acceleration of a particle moving	g on a curved path	
611LA	Linear Algebra	Z,ZK	3
Vector spaces (line	ar combinations, linear independence, dimension, basis, coordinates). Matrices and operations. Systems of linear equations and the	ir solvability. Deteri	ninants and
	their applications. Scalar product. Similarity of matrices (eigenvalues and eigenvectors). Quadratic forms and their classificati	ion.	
611LP	Linear Programming	KZ	3
Formulation of the	problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex po	lyedra. Simplex m	ethod, basic
	solutions, duality principle in linear programming, stability of solution of linear programming problem. Traffic problem.		
611MSP	Modeling of Systems and Processes	Z,ZK	4
System and subsys	stem, external and internal system description, continuous and discrete system, mathematics as a tool, examples of formulation of differences to the system of the system	ential and differentia	al equations
Linear and nor	linear system, stationary and non-stationary system, causality. Convolutional integral. Laplace and Z transformations. Transfer function	on. Stability of LTI s	ystems.
	Discretization of continuous systems. System interconnection.		

611STAT	Statistics	Z,ZK	4
	l l	, , , , , , , , , , , , , , , , , , ,	
	ility, random variable and its description, known distributions, random vector, function of random variable. Methods of point estimation. To	_	
Regression and cor	relation, linear regression, correlation coefficient, coefficient of determination, the general linear model, statistical inference in linear regression.	gression, analysis	or variance,
	multiple regression, the use of matrices in regression.		
611XBBP	Bachelor Thesis Seminar	Z	1
612MDE	Transport Models and Transport Excesses	Z,ZK	3
Parameters of the t	raffic flow and methods for their measurement. Models of the traffic flow, communications load, line and urban systems. Theory of qu	eues, shock waves	s. Quality of
transport and its a	issessment. Statistical characteristics of transport. Transport excesses, their analysis, the causes, identify and minimize the conseque	ences. Improving o	f transport
	safety and fluency.		
612PPOK	Designing Roads, Highways and Motorways	KZ	3
	pwnership, maintenance, management and categorization of roads and highways. Curve and transition curve. Sinuosity and standard	· · · —	-
	stopping and overtaking. Road body - shapes and proportions, bottom and superstructure. Drainage and components of roads. Safety	-	
rtange of violenties	intersections.	, acrico. c. c.c	o, janonono,
640VDDD	Bachelor Thesis Seminar	7	- 1
612XBBP		Z	1
612ZAR	Introduction to Architectural Design	Z	3
Urbanism and	architecture of traffic systems. Bus and trolley-bus transport. Tramway and town tracks. Design of vehicles. Subway. Railway transport.	t. Railway stations	. Local
	communications. International airports.		
612ZPV	Railway Operation	Z,ZK	4
Legislation in raily	ay transport. Railway vehicles. Railway signals and signal devices. Railway traffic organisation and operation. Simplified railway traffic	c operation. Railwa	y vehicles
	brakes. Railway vehicles marking. Operation intervals. Theoretical graph of train running.		
612ZTS	Railway Lines and Stations	Z,ZK	4
Rail transport. Ra	ilway track geometry parameters. Route layout of railway lines. Railway line construction - railway substructure and superstructure. S	, , , , , , , , , , , , , , , , , , ,	wav lines.
	Railway control systems in relation to infrastructure. Operating and carriage points. Railway lines net and category. Traction in rail tr		,
612ZYDK	Introduction to Transportation Engineering	Z,ZK	3
	on in land-use planning. Basic terms in transportation engineering. Traffic survey and traffic prognosis. Introduction to topic of roads, pr	· · · · · · · · · · · · · · · · · · ·	-
rtole of transportati		abile mass transpo	it. Negative
614400	impacts of transportation to environment and safety.	1/7	
614ASD	Algorithm and Data Structures	KZ	3
	niliarized with selected basic and derived data structures, algorithms, their properties and their design procedure. Students will analyze		
solutions to the se	et task and the resulting algorithm write by means of flowcharts, practice in reading algorithms recorded by means of the flowchart an	id use the basics of	of Boolean
	algebra with forming the conditions for the algorithms.		
614DATS	Database Systems	KZ	2
Basic concepts of	f database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security and	d integrity of data,	database
	queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via t	the WWW.	
614DMG	Datamining	KZ	2
Types of data sour	ces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquis	ition systems for d	ata mining,
	tics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesian	-	- 1
g	Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www.	,	,.
614KSP	Constructing with Computer Aid	KZ	2
	· · · · · · · · · · · · · · · · · · ·		
-	m determination. CAD role in projecting system model. Existing CAD systems on Czech market. Project creation, basic common world		
and CA systems.	Co-ordinated systems, CAD environment skill (basics of constructing, dimensioning, modifications, user interfaces, projecting possible and provided	ilites, Autocad en	vironinent
04414100	profiles, drawings with raster foundaments).	177	
614MPG	Modern Programming Approaches	KZ	2
Principles of object	t oriented programming, polymorphism, references, memory allocation, inheritage, generic programming, operator overloading, STL l	library, object imple	ementation
	of abstract data types, graph and graph algorithm implementation focused on logistic problems.		
614PRG	Programming	KZ	2
Algorithm develop	oment, methods of structured programming, high-level programming languages, basics of C programming languages (types, variable:	s, conditions, cycle	es, arrays,
	functions), programming techniques, complexity.		
614W1HW	Computer Hardware	KZ	4
Computer archite	cture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separate p	parts designing - co	ontrollers,
	arithmetic and logical units, I/O subsystem.	- -	
614W1PJ	C Programming Language	KZ	4
	guage. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, strin		
- p g	Implementations of abstract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise op	-	
614W1PZ	Advanced Data Processing in Spreadsheets	KZ	4
	familiar with principles of working in a spreadsheet. Graphic layout of the table appearance, formatting of numbers, insertion of formu		
			- 1
addressing, error de	etection. Working with large spreadsheets, filters, advanced filters, database functions. Pivot tables and charts, conditional formatting, so	olution infairig, solv	ei, macros,
04 (144115	data analysis. Examples and questions from various companies and training.	1/7	
614W1UP	Editing of Theses in MS Word	KZ	4
	introduced to the principles of creating and editing large documents and basic typographic rules. They will properly apply styles, creat		
tigures, tables, grap	ohs, etc. Footnotes, captions, index. They practice corrections of finished documents. The goal is to prepare students for seamless ed	iting dissertations	and theses,
	so that they are able to concentrate mainly on writing a thesis.		
614XBBP	Bachelor Thesis Seminar	Z	1
615DPLG	Transportation Psychology	Z	2
	gy and its basic concepts. Information intake, decision-making and behaviour. Performance. Engineering psychology and vehicle const		
	el route and traffic conditions, accidents and traffic incidents. Selection and training of the staff. Work and leisure. Age as a factor in tra	-	•
615JZ1A	Foreign Language - English 1	7	3
	ures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and cor	← mmunicative skills	
aalioui oli doll	stylistics forms. Oral and written presentation of original research. Academic text principles and reading comprehension. Principles of		
615JZ2A		Z,ZK	3
	Foreign Language - English 2	· ' '	-
Grammatical Structi	ures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and cor		Lienienialy
	stylistics forms. Oral and written presentation of original research. Academic text principles and reading comprehension. Principles of	n inclose.	

615JZ3F			1
Crammar and atul	Foreign Language - French 3	Z	3
-	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la 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.	(
615JZ3I	Foreign Language - Italian 3	Z	3
-	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	vith (professional)	text and its
615JZ3N	features. Practice of oral and written presentation.	Z	3
	Foreign Language - German 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	-	_
-	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.	,	
615JZ3R	Foreign Language - Russian 3	Z	3
-	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	vith (professional)	text and its
615JZ3S	features. Practice of oral and written presentation. Foreign Language - Spanish 3	Z	3
	Foreight Language - Spanish 3 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	_	_
-	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.	,	
615JZ4F	Foreign Language - French 4	Z,ZK	3
-	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	vith (professional)	text and its
615JZ4I	features. Practice of oral and written presentation. Foreign Language - Italian 4	Z,ZK	3
	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	,	_
-	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.		
615JZ4N	Foreign Language - German 4	Z,ZK	3
=	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	vith (professional)	text and its
615JZ4R	features. Practice of oral and written presentation.	Z,ZK	3
	Foreign Language - Russian 4 istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	,	_
-	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.	. ,	
615JZ4S	Foreign Language - Spanish 4	Z,ZK	3
Grammar and styli	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la	anguage structure	knowledge
Grammar and styli	istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work v	anguage structure	knowledge
Grammar and styli and perceptive and	stics. 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 value features. Practice of oral and written presentation.	anguage structure vith (professional)	knowledge text and its
Grammar and styli and perceptive and 615W1BO	stics. 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 vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms are stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms are stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms are stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms are stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms are stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development of the forms of the form of the forms of th	anguage structure vith (professional)	knowledge text and its
Grammar and styli and perceptive and 615W1BO	stics. 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 value features. Practice of oral and written presentation.	anguage structure vith (professional)	knowledge text and its
Grammar and styli and perceptive and 615W1BO	stics. 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 vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work vocabulary development. Basic stylistic forms. Presentation. Work Safety and Health Protection in Transportation lative, definition of terms, risks and possible health damage, working conditions and health protection with focus on transportation.	anguage structure vith (professional)	knowledge text and its
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617IVED			
	Integration of Public Transport	Z,ZK	3
	both EU and CR, transport sectoral strategies, land use planning and evolution of space organization, integration of public service in	•	
activities and orga	anizational structures of integrated public transport systems, internal and external bindings, contracting, carriage relations, conditions	of both rail and bu	us transport
	operations, grading and quality, IS, marketing.		
617KLID	Quality in transport service	Z,ZK	3
•	ation of quality, standards and international standardization, integrated management systems, modern attitudes of quality management		
and logistics, meth	lods of quality measurement, quality management, risks and opportunities, public transport quality, view of costumers, carriers and PT-	organizers, qualit	y standards
0471.07	quality costs, marketing and costumer satisfaction.	7.71/	
617LGT	Logistics	Z,ZK	6
Logistics definition	n, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intellige	ent logistics syster	ns, logistics
04714400	City.	1/7	1 4
617MAGD	Marketing Transport rategic marketing plans, Implementation of marketing campaigns, Branding and brand promotion, Public relations – industry, business	KZ	4
•	rategic marketing plans, implementation of marketing campaigns, branding and brand promotion, Fublic relations – industry, business rch engine optimization, Government relations and industry organization lobbying, Advertising and strategic sponsorships, Multimedia		
development, sear	videos, Direct marketing and related lead generation campaigns	presentations an	u corporate
617MDP	Transport prognostic methods	KZ	2
	economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statistical		I
The teeringues of t	indices.	values doing anno	510110100 0110
617MRRK	Managerial Decision-making and Management	Z,ZK	3
	g process; identifying exactly what the problem is; evaluating the issue; solving the issue; using multiple perspective analysis to make a	•	1
	thinking.		
617NAPR	Freight Traffic	Z	2
017101111	Freight traffic and transportation system, conditions of implementation, forwarding.	_	_
617TEDK	Transport Technology and Logistics	KZ	4
-	nsport technology and logistics, particular steps of transport planning, line planning, timetabling, planning in pasanger and freight trans	- -	
	nodus, technologic factors of the side of operator and client, organisation of city transport, logistic technologies and their aplication using		
617TGA	Graph Theory and its Applications in Transport	Z,ZK	4
	f graph theory, paths in graphs, flows in networks, location problems, design problems on graphs, optimum routing, use of graphs in o	•	I
617TVD	Technology of Public Transport	Z,ZK	5
	ents a detailed description of new knowledge and basic principles of hierarchical planning of public transport system accenting the ger	,	_
	quantified transport demand. The course would be oriented on multiple and multi-level optimisation of passenger public transport states.		· ·
617W1EV	Public Sector Economy	KZ	4
	rincial theory of public sector, public choice theory, externalites, decisions about public finance allocation, economic assesment of publi	ic projects (CBA,	MCA, CEA),
tax system of the C	R, state budget, management of public projects a their economic efficiency assessment, way of elaboration of PPP projects, funding fro	m EU funds, prog	ram HDM-4.
617W1LL	Logistics of Passenger and Freight Air Transportation		
		KZ	4
Logistics airline pa	issenger and cargo. Aircraft and airport terminals for passenger and cargo transport. Airlines in terms of logistics systems. Aerial trans		1
Logistics airline pa	,		1
Logistics airline par	issenger and cargo. Aircraft and airport terminals for passenger and cargo transport. Airlines in terms of logistics systems. Aerial trans		1
617W1MD	issenger and cargo. Aircraft and airport terminals for passenger and cargo transport. Airlines in terms of logistics systems. Aerial transports air cargo. Information systems in air transport. Global distribution systems. Marketing in Transportation of marketing applied to transport issues, marketing tools suitable for transport as a service, specifics of public passenger transport are	port process pas	sengers and
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618TED	Technical Documentation	KZ	2
Technical standa	ords, international standardization, technical drawings, representation of technical objects, technical diagrams and charts, dimensional	al and geometrica	al accuracy,
	arrangement of drawing sheets.		
618XBBP	Bachelor Thesis Seminar	Z	1
620SYSA	Systems Analysis	Z,ZK	5
Introduction to syst	em sciences, system viewpoint, terminology, typical system analysis tasks, system identification, system interface and interface tasks	, processes, syst	em behaviou
and its analysis,	strong functions and processes, genetic code, system identity, system architecture. Tools for system analysis - Petri nets, decision tab	oles, algorithms fe	or structural
	tasks. Soft and hard systems, methods for soft system analysis.		
620UITS	Introduction to Intelligent Transport Systems	Z,ZK	7
٠.	gislative framework telematics systems and their architecture. Telematics systems in practice and their operation. Fundamentals of infor		
systems for ITS. Pr	inciples and technical support measurement of traffic data, localization and navigation. Practical work with traffic data. Real examples principles of ITS.	of possible appli	ications of the
620XBBP	Bachelor Thesis Seminar	Z	1
621W1BS	Unmanned aircraft systems 1	KZ	4
-	n Development. Aircraft design. Legislation in force in the Czech Republic. Planning and execution of the flight. Airspace division. Ope	1	d operational
	procedures. Practical flights.		
621W1MP	Matlab for project-oriented study	KZ	4
The subject's sylla	bus is focused on the problem-solving during bachelor's thesis preparation and it is based on students' requests. Individual exercises	will be prepared	according to
particular examp	les, based on actual students' needs and suggestions. The subject will have a flexible form, which is expected to bring an improveme	ent of students' M	latlab skills.
621W1OH	Airline Business and Operations	KZ	4
The course provide	s a comprehensive view of the commercial, operational and transportation activities of air transport companies. It focuses on the organiz	ational structure	of companies
various aspects of	their strategy, economic and operational indicators. It introduces students in detail to operational processes and the essentials of transp	ortation process	es. It provides
	a basic view of the economic aspects of air transport.		
621W1RZ	Human Resources Management	KZ	4
•	human resources in the organization and related disciplines file. Substance, importance and challenges of human resources manage		
environment of hun	nan resource management. Human resource planning. Search, recruitment and selection of employees. Motivation, evaluation and ren	nuneration of stat	ff. Positioning
COANATH	dismissal and redundancies of employees. Education of employees. Planning career management.	KZ	4
621W1TH	Aircraft Technical Handling	1	1
•	and pushing tractors. GPU. Air conditioning and heating units. Aircraft fuel equipment. De-acing and anti-icing units. Loading and unlo Issangers onboarding and offboarding. Operational processes of aircraft technical handling and regulations. Modernization and techn		ipment ior
621XBBP	Bachelor Thesis Seminar	Z	1
621ZALD	Basics of Air Transport	KZ	2
-	terminology, basic rules. VFR/IFR. Basics of aerodynamics. Propulsion of aircraft. Aircraft design. Basics of navigation, radio navigation.		_
• • • • • • • • • • • • • • • • • • • •	timization of speed and heights, minimum fuel. Limitations of operation, maintenance, service life of aircraft. Traffic management, grou	•	
Flight planning, opt	Airlines and economics. Space technologies.	_	-
Flight planning, opt			
Flight planning, opt	Bachelor Thesis Seminar	Z	1
	Bachelor Thesis Seminar Bachelor Thesis Seminar	Z Z	1
622XBBP			

For updated information see http://bilakniha.cvut.cz/en/FF.html Generated: day 2024-05-17, time 04:58.