Study plan

Name of study plan: Bachelor TET-LOG Part-Time from 2024/25

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: 91

The role of the block: Z

Code of the group: 1S-BK-TET-24/25

Name of the group: 1st Sem. Bachelor Part-Time TET from 2024/25

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:

| vote on the gi | roup: | | | | | |
|----------------|--|------------|---------|-----------|----------|------|
| 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 |
| 11CAL1 | Calculus 1 Olga Vraštilová, Tomáš Tasák, Magdalena Hykšová, Bohumil Ková, Ond ej Navrátil Bohumil Ková Ond ej Navrátil (Gar.) | Z,ZK | 7 | 2P+4C+22E | Z | Z |
| 11LA | Linear Algebra Lucie Kárná, Pavel Provinský, Martina Be vá ová Martina Be vá ová Martina Be vá ová (Gar.) | Z,ZK | 3 | 2P+1C+10E | Z | Z |
| 12ZADK | Introduction to Transportation Engineering Dagmar Ko árková, Jana Štikarová | Z,ZK | 5 | 12B | Z | Z |
| 18MTY | Materials Science and Engineering Jaromír Kylar, Veronika Drechslerová, Jaromír Kylar, Nela Kr má ová, Jitka ezní ková, Jaroslav Valach, Vít Malinovský, Veronika Drechslerová, Jaromír Kylar Jaroslav Valach Jaroslav Valach (Gar.) | Z,ZK | 3 | 2P+1C+10E | Z | Z |
| 11GIE | Geometry Pavel Provinský, Old ich Hykš, Šárka Vorá ová Old ich Hykš Old ich Hykš (Gar.) | KZ | 3 | 2P+2C+12E | Z | Z |
| 14ASD | Algorithm and Data Structures Tomáš Brandejský, Michal Je ábek, Alena Kubá ová, Jan Procházka, Vít Fábera, Martin Fiala Vít Fábera Vít Fábera (Gar.) | KZ | 3 | 0P+2C+8E | Z | Z |
| 18TKK | Technical Drawing and Designing Jitka ezní ková, Vít Malinovský, Jan Šleichrt, Martin Brumovský, Jan Mejst ík, Drahomír Schmidt, Lukáš Svoboda, Jan Vogl, Ji í Zeisek, Jan Šleichrt Jan Šleichrt (Gar.) | KZ | 4 | 2P+2C+16E | Z | Z |
| 16UDOP | Introduction into Vehicles Zuzana Radová, Petr Bouchner | Z | 2 | 2P+0C+8E | Z | Z |

Characteristics of the courses of this group of Study Plan: Code=1S-BK-TET-24/25 Name=1st Sem. Bachelor Part-Time TET from 2024/25

| 11CAL1 | 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. Indefinite integral, Newton integral, Riemann integral, improp | | | | | | | |
| Riemann integral. First- | order differential equations, linear differential equations. | | | | | | |
| 11LA | 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 | their applications. Scalar product. Similarity of matrices (eigenvalues and eigenvectors). Quadratic forms and their classification. | | | | | | |
| 12ZADK | Introduction to Transportation Engineering | Z,ZK | 5 | | | | |

18MTY Materials Science and Engineering Basic course of materials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure. However the main attention is paid to metals as the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and composites. Attention is also paid to degradation processes in materials, to defectoscopy and to main mechanical tests. Geometry Differential geometry of curves - parameterization, the 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 on a curved path 14ASD Algorithm and Data Structures Students will analyze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithms written using flowcharts, and use basic Boolean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - variable, branching, loops, they will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programs. 18TKK Technical Drawing and Designing ΚZ 16UDOP 2 Ζ Introduction into Vehicles Vehicles and transportation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water transport. Alternative means

Code of the group: 2S-BK-TET-24/25

tasks. Soft and hard systems, methods for soft system analysis.

of transport. Lifting equipment and conveyors. Legislation.

Name of the group: 2nd Sem. Bachelor Part-Time TET from 2024/25

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:

| Note on the grou | P. | | | | | |
|------------------|---|------------|---------|-----------|----------|------|
| 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 |
| 11CAL2 | Calculus 2 Olga Vraštilová, Tomáš Tasák, Magdalena Hykšová, Ond ej Navrátil, Old ich Hykš Magdalena Hykšová Ond ej Navrátil (Gar.) | Z,ZK | 5 | 2P+3C+20B | L | Z |
| 11STAT | Statistics Pavel Provinský, Evženie Uglickich, Pavla Pecherková, Michal Matowicki, Natálie Blahitka, Ivan Nagy, Jana Kuklová Pavla Pecherková Evženie Uglickich (Gar.) | Z,ZK | 4 | 2P+2C+12B | L | Z |
| 12ZTS | Railway Lines and Stations Lukáš Týfa, Martin Jacura, Petr Šatra, Tomáš Javo ík, Ond ej Trešl Lukáš Týfa (Gar.) | Z,ZK | 4 | 2P+2C+10B | L | Z |
| 18SAT | Structural Analysis Jaromír Kylar, Veronika Drechslerová, Nela Kr má ová, Jitka ezní ková, Jan Šleichrt, Daniel Kytý, Jan Vy ichl, Tomáš Doktor, Jan Falta Daniel Kytý (Gar.) | Z,ZK | 4 | 2P+2C+14B | L | Z |
| 20SYSA | Systems Analysis Zuzana B linová, Ji í R ži ka, Patrik Horaž ovský, Petr Bureš Zuzana B linová (Gar.) | Z,ZK | 5 | 2P+2C+14B | L | Z |
| 14PRG | Programming Alena Kubá ová, Jan Procházka, Martin Fiala, Lukáš Svoboda, Jana Kaliková, Jan Kr ál Jana Kaliková Jana Kaliková (Gar.) | KZ | 2 | 0P+2C+8B | L | Z |
| 17TEDK | Transport Technology and Logistics Michal Drábek Michal Drábek (Gar.) | KZ | 4 | 12B | L | Z |
| 21ZALD | Basics of Air Transport Jakub Hospodka, Tomáš Tlu ho , Ji í Volt, Peter Olexa, Jan Slezá ek, Jakub Trýb, Sébastien Lán, Bo Stloukal | KZ | 2 | 0P+2C+8B | L | Z |

Characteristics of the courses of this group of Study Plan: Code=2S-BK-TET-24/25 Name=2nd Sem. Bachelor Part-Time TET from 2024/25

| 11CAL2 | Calculus 2 | Z,ZK | 5 |
|----------------------|--|-------------------------|----------------|
| Linear differential | equations and their systems, differential calculus of functions of several real variables. Riemann integral in Rn. Line and surface | integrals. | |
| 11STAT | Statistics | Z,ZK | 4 |
| Basics of probabili | ity Descriptive statistics Population and sample, limit theorem Point estimate, construction and properties Interval estimates Para | ametric tests Nonpara | ametric tests |
| Regression and co | orrelation analysis | | |
| 12ZTS | Railway Lines and Stations | Z,ZK | 4 |
| Rail transport. Rai | lway track geometry parameters. Route layout of railway lines. Railway line construction - railway substructure and superstructur | e. Spatial layout of ra | ilway lines. |
| Railway control sy | stems in relation to infrastructure. Operating and carriage points. Railway lines net and category. Traction in rail transport. | | |
| 18SAT | Structural Analysis | Z,ZK | 4 |
| General system of | forces in plane and space. Calculation of reactions of bodies and structures. Assessment of internal forces on statically determi | nate beams and simp | ole girders. |
| Principle of virtual | work. Kinematic method for calculation of reactions of statically determinate systems. Determination of axial forces in truss construc | tions. Cross-sectional | characteristic |
| of planar shapes. | Fiber polygons and chains. | | |
| 20SYSA | Systems Analysis | Z,ZK | 5 |
| Introduction to sys | tem sciences, system viewpoint, terminology, typical system analysis tasks, system identification, system interface and interface | tasks, processes, sys | stem behavior |
| and its analysis st | trong functions and processes, genetic code, system identity, system architecture. Tools for system analysis - Petri nets, decision | tables algorithms for | r structural |

14PRG **Programming** The Course Programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programming language is expanded here so that the participant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searching, tuples, sets, dictionaries, working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML).

Transport Technology and Logistics

Basics of Air Transport

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. 21ZALD

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-BK-TET-25/26

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

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:

| 11010 011 1110 ; | <u> </u> | 1 | 1 | 1 | 1 1 | |
|------------------|---|------------|---------|-----------|----------|------|
| 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 |
| 11FYZ | Physics Old ich Hykš, Jana Kuklová, Pavel Demo, Zuzana Malá, Tomáš Vít Jana Kuklová Pavel Demo (Gar.) | Z,ZK | 5 | 2P+2C+18E | B Z | Z |
| 12MDE | Transport Models and Transport Excesses Josef Kocourek, Tomáš Pad lek | Z,ZK | 3 | 2P+1C+8E | B Z | Z |
| 11TGA | Graph Theory and its Applications in Transport Denisa Mocková, Dušan Teichmann Denisa Mocková Denisa Mocková (Gar.) | Z,ZK | 4 | 2P+2C+12E | B Z | Z |
| 18PZP | Elasticity and Strength Jitka ezni ková, Jan Šleichrt, Daniel Kytý, Jan Vy ichl, Tomáš Doktor, Josef Jíra, Ond ej Jiroušek Ond ej Jiroušek (Gar.) | Z,ZK | 3 | 2P+1C+10E | B Z | Z |
| 20UITS | Introduction to Intelligent Transport Systems Ji í R ži ka, Patrik Horaž ovský, Kristýna Navrátilová, Viktor Beneš, Eva Haj iarová, Martin Langr, Vladimír Faltus, Pavel Hrubeš Martin Langr | Z,ZK | 7 | 3P+2C+20E | B Z | Z |
| 12PPOK | Designing Roads, Highways and Motorways Josef Kocourek, Tomáš Pad lek, Polina Zayats, Petr Kumpošt Josef Kocourek (Gar.) | KZ | 3 | 1P+2C+10E | B Z | Z |
| 14DATS | Database Systems Jana Kaliková, Jan Kr ál Jana Kaliková Jana Kaliková (Gar.) | KZ | 2 | 1P+1C+10E | B Z | Z |
| 15JZ1A | Foreign Language - English 1 Markéta Vojanová, Dana Boušová, Marie Michlová, Marek Tome ek, Jan Feit, Markéta Musilová, Peter Morpuss, Lenka Monková, Jitka He manová, | Z | 3 | 0P+4C+10E | B Z | Z |

Characteristics of the courses of this group of Study Plan: Code=3S-BK-TET-25/26 Name=3rd Sem. Bachelor Part-Time TET from

| 11FYZ | Physics | Z,ZK | 5 |
|------------------------|---|---------------------|--------------------|
| Kinematics, dynam | cs, Newton's laws, force fields, mechanics of continuum, thermodynamics, introduction to electrostatics and electric current. | | <u> </u> |
| 12MDE | 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 | f queues, shock | waves. Quality o |
| transport and its as | sessment. Statistical characteristics of transport. Transport excesses, their analysis, the causes, identify and minimize the conse | quences. Improvi | ng of transport |
| safety and fluency. | | | |
| 11TGA | Graph Theory and its Applications in Transport | Z,ZK | 4 |
| Basic terms of grap | h theory, paths in graphs, flows in networks, location problems, design problems on graphs, optimum routing, use of graphs in of | her scientific disc | iplines. |
| 18PZP | Elasticity and Strength | Z,ZK | 3 |
| Tension and compr | ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolt | ed and welded jo | ints of structures |
| Analysis of deflection | on curve of beams. Torsion of circular cross sections. Combined loading. Stability. | | |
| 20UITS | Introduction to Intelligent Transport Systems | Z,ZK | 7 |
| Terminology and leg | islative framework telematics systems and their architecture. Telematics systems in practice and their operation. Fundamentals of i | nformation and te | lecommunication |
| systems for ITS. Pr | nciples and technical support measurement of traffic data, localization and navigation. Practical work with traffic data. Real exam | ples of possible a | pplications of th |
| principles of ITS. | | | |
| 12PPOK | Designing Roads, Highways and Motorways | KZ | 3 |
| Definition, types, ov | rnership, maintenance, management and categorization of roads and highways. Curve and transition curve. Sinuosity and stand | ard speed. Route | in rural areas. |
| Range of vision for | stopping and overtaking. Road body - shapes and proportions, bottom and superstructure. Drainage and components of roads. S | afety device. Cro | ssings, junction |
| intersections. | | | |
| 14DATS | Database Systems | KZ | 2 |
| Basic concepts of c | atabase systems, conceptual model, relational data model, the principles of normal forms, relational database design, security a | nd integrity of da | ta, database |
| queries, relational a | lgebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via the WWW. | | |
| 15JZ1A | Foreign Language - English 1 | 7 | 3 |

Grammatical Structures and Style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and communicative skills. Elementary

stylistics forms. Oral and written presentation of original research. Academic text principles and reading comprehension. Principles of rhetoric.

Code of the group: XB-BK-LOG-26-27

Name of the group: Bachelor Thesis Seminar Bachelor TET-LOG Part-Time from 2026/27

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:

Name of the block: Compulsory courses in the program

Minimal number of credits of the block: 71

The role of the block: P

Code of the group: 4S-BK-LOG-25/26

Name of the group: 4th Sem. Bachelor Part-Time TET-LOG from 2025/26 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 |
|--------|---|------------|---------|-----------|----------|------|
| 11MSP | Modeling of Systems and Processes Bohumil Ková, Lucie Kárná Bohumil Ková Bohumil Ková (Gar.) | Z,ZK | 4 | 2P+2C+12B | L | Р |
| 17ESYS | Transport Systems Economy Rudolf Franz Heidu, Roman Št rba Rudolf Franz Heidu (Gar.) | Z,ZK | 6 | 3P+2C+18B | L | Р |
| 17LGT | Logistics Tomáš Horák, Eliška Glaserová Tomáš Horák (Gar.) | Z,ZK | 6 | 3P+2C+18B | L | Р |
| 11LP | Linear Programming Šárka Vorá ová, Pavla Pecherková, Ivan Nagy Pavla Pecherková Ivan Nagy (Gar.) | KZ | 3 | 2P+1C+12B | L | Р |
| 11MDP | Transport Prognostic Methods Alena Rybi ková Alena Rybi ková Denisa Mocková (Gar.) | KZ | 2 | 2P+0C+10B | L | Р |
| 16DPO | Vehicle Technology Josef Mík, Josef Svoboda, P emysl Toman Josef Mík (Gar.) | KZ | 2 | 2P+0C+10B | L | Р |
| 15JZ2A | Foreign Language - English 2 Markéta Vojanová, Marie Michlová, Marek Tome ek, Jan Feit, Markéta Musilová, Peter Morpuss, Lenka Monková, Jitka He manová, Eva Rezlerová, | Z,ZK | 3 | 0P+4C+10B | L | Р |

Characteristics of the courses of this group of Study Plan: Code=4S-BK-LOG-25/26 Name=4th Sem. Bachelor Part-Time TET-LOG from 2025/26

| 11MSP | Modeling of Systems and Processes | Z,ZK | 4 |
|---|---|---|--------------------------------------|
| System and subsy | stem, external and internal system description, continuous and discrete system, mathematics as a tool, examples of formulation of di | 1 ' 1 | ential equations |
| Linear and nonline | ear system, stationary and non-stationary system, causality. Convolutional integral. Laplace and Z transformations. Transfer functic | on. Stability of LTI s | ystems. |
| Discretization of c | ontinuous systems. System interconnection. | | |
| 17ESYS | Transport Systems Economy | Z,ZK | 6 |
| Macroeconomics, | macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system a | nd its quantification | , rationalizatio |
| of transport syster | m. | | |
| 17LGT | Logistics | Z,ZK | 6 |
| Logistics definition | n, basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and inte | lligent logistics sys | tems, logistics |
| city. | | | |
| 11LP | Linear Programming | KZ | 3 |
| Tanana da da a a 4 da a | a problem of linear programming, transposintion of some proptical problems to the linear programming problems. Cimpley and some | | |
| Formulation of the | e problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and conve | x polyedra. Simplex | k method, basi |
| | prioriem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and conve principle in linear programming, stability of solution of linear programming problem. Traffic problem. | x polyedra. Simplex | k method, basi |
| | | x polyedra. Simples | c method, basi |
| solutions, duality p | principle in linear programming, stability of solution of linear programming problem. Traffic problem. | KZ | 2 |
| solutions, duality particles of the techniques of | orinciple in linear programming, stability of solution of linear programming problem. Traffic problem. Transport Prognostic Methods | KZ | 2 |
| solutions, duality p | orinciple in linear programming, stability of solution of linear programming problem. Traffic problem. Transport Prognostic Methods | KZ | 2 |
| solutions, duality p 11MDP The techniques of indices. 16DPO | principle in linear programming, stability of solution of linear programming problem. Traffic problem. Transport Prognostic Methods feconomical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statis | KZ ktical values using o | 2 differencies an |
| solutions, duality particles of indices. 16DPO Vehicle. Functions | principle in linear programming, stability of solution of linear programming problem. Traffic problem. Transport Prognostic Methods feconomical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statis Vehicle Technology | KZ ktical values using o | 2 differencies an |
| solutions, duality particles of indices. 16DPO Vehicle. Functions | principle in linear programming, stability of solution of linear programming problem. Traffic problem. Transport Prognostic Methods f economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statis Vehicle Technology s, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage | KZ ktical values using o | 2 differencies and |
| solutions, duality particles of indices. 16DPO Vehicle. Functions Transshipment. Te 15JZ2A | principle in linear programming, stability of solution of linear programming problem. Traffic problem. Transport Prognostic Methods f economical analysis in the domain of analysis of dependencies, analysis and construction of time series and comparsion of statis Vehicle Technology s, principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage technological components of various modes of transport. Management and control of various means of transport. Safety. | KZ stical values using of KZ seedsign. Drive. Ele | 2 differencies an 2 ectric traction. |

Code of the group: 5S-BK-LOG-26/27

Name of the group: 5th Sem. Bachelor Part-Time TET-LOG from 2026/27

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 |
|--------|---|------------|---------|-----------|----------|------|
| 12ZPV | Railway Operation Martin Jacura, Jan Kruntorád | Z,ZK | 4 | 2P+1C+12B | Z | Р |
| 17EPOD | Economics of Transport Company Alexandra Dvo á ková, Václav Baroch Alexandra Dvo á ková (Gar.) | Z,ZK | 6 | 4P+2C+18B | Z | Р |
| 17TVD | Technology of Public Transport Stanislav Metelka, Vít Janoš, Ji í Pospíšil, Zden k Michl Vít Janoš (Gar.) | Z,ZK | 5 | 2P+2C+18B | Z | Р |
| 14DMG | Datamining Radek Holý Radek Holý Radek Holý (Gar.) | KZ | 2 | 0P+2C+10B | Z | Р |
| 17MAGD | Marketing in Transport Petra Skolilová Petra Skolilová (Gar.) | KZ | 4 | 2P+1C+12B | Z | Р |
| 17ZAP | Fundamentals od law Martina D v rová Martina D v rová (Gar.) | Z | 2 | 2P+0C+10B | Z | Р |

Characteristics of the courses of this group of Study Plan: Code=5S-BK-LOG-26/27 Name=5th Sem. Bachelor Part-Time TET-LOG from 2026/27

| 2026/27 | | | |
|----------------------|---|---------------------|------------------|
| 12ZPV | Railway Operation | Z,ZK | 4 |
| Legislation in railw | ay transport. Railway vehicles. Railway signals and signal devices. Railway traffic organisation and operation. Simplified railway tr | affic operation. Ra | ilway vehicles |
| brakes. Railway ve | hicles marking. Operation intervals. Theoretical graph of train running. | | |
| 17EPOD | Economics of Transport Company | Z,ZK | 6 |
| Economy, margina | l utility, marginal costs, function of supply and demand, market equilibrium, perfect competition and types of market arrangement | . Transportation m | arket, transport |
| company, it's envir | onment, balance sheet, costs, revenue, profit and maximalization of profit. Business plan, taxation in transport. | | |
| 17TVD | Technology of Public Transport | Z,ZK | 5 |
| The course conter | ts a detailed description of new knowledge and basic principles of hierarchical planning of public transport system accenting the | general transport | planning and |
| quantified transpor | t demand. The course would be oriented on multiple and multi-level optimisation of passenger public transport system. | | |
| 14DMG | 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 ac | quisition systems | or data mining |
| mining characteris | tics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayes | sian cob., using ne | ural networks) |
| Prediction. Cluster | analysis. Mining in complex structured data, multimedia dbf., www. | | |
| 17MAGD | Marketing in Transport | KZ | 4 |
| Development of st | ategic marketing plans. Implementation of marketing campaigns. Branding and brand promotion. Public relations industry, busine | ss and vertical ma | arket. Website |
| development, sear | ch engine optimization. Government relations and industry organization lobbying. Advertising and strategic sponsorships. Multime | edia presentations | and corporate |
| videos. Direct mar | xeting and related lead generation campaigns. | | |
| 17ZAP | Fundamentals od law | Z | 2 |

Code of the group: 6S-BK-LOG-26/27

Name of the group: 6th Sem. Bachelor Part-Time TET-LOG from 2026/27

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 |
|--------|---|------------|---------|-----------|----------|------|
| 17FID | Financing and Investment in Transport Alexandra Dvo á ková, Olga Mertlová Olga Mertlová (Gar.) | Z,ZK | 4 | 2P+1C+12B | L | Р |
| 17IVED | Integration of Public Transport Roman Št rba Roman Št rba (Gar.) | Z,ZK | 3 | 2P+1C+10B | L | Р |
| 17KLID | Quality in Transport Service Pavel Edvard Van ura Pavel Edvard Van ura (Gar.) | Z,ZK | 3 | 2P+1C+10B | L | Р |
| 17MRRK | Managerial Decision-making and Management Alexandra Dvo á ková Alexandra Dvo á ková (Gar.) | Z,ZK | 3 | 10B | L | Р |
| 14MPG | Modern Programming Approaches Michal Je ábek, Vít Fábera (Gar.) | KZ | 2 | 0P+2C+8B | L | Р |
| 17GEDS | Geography of Transport Systems Miroslav Marada Miroslav Marada (Gar.) | KZ | 2 | 2P+0C+8B | L | Р |
| 12ZAR | Introduction to Architectural Design Karel Hájek | Z | 3 | 2P+0C+8B | L | Р |
| 17NAPR | Freight Traffic Roman Št rba Roman Št rba (Gar.) | Z | 2 | 2P+0C+8B | L | Р |

Characteristics of the courses of this group of Study Plan: Code=6S-BK-LOG-26/27 Name=6th Sem. Bachelor Part-Time TET-LOG from 2026/27

| 17FID | Financing and Investment in Transport | Z,ZK | 4 |
|--|--|---|--|
| • | of transport infrastructure, the role of public administration in the financing and realization of investment in transport, the investi les, competition, effectiveness and efficiency of spending public funds, evaluation systems of public projects and programs. | ment project projec | t cycle, subsid |
| 17IVED | Integration of Public Transport | Z,ZK | 3 |
| activities and organiz | th EU and CR, transport sectoral strategies, land use planning and evolution of space organization, integration of public servic ational structures of integrated public transport systems, internal and external bindings, contracting, carriage relations, condition and quality, IS, marketing. | • | |
| 17KLID | Quality in Transport Service | Z,ZK | 3 |
| and logistics, method | n of quality, standards and international standardization, integrated management systems, modern attitudes of quality managen s of quality measurement, quality management, risks and opportunities, public transport quality, view of costumers, carriers and ng and costumer satisfaction. | | • |
| 17MRRK | Managerial Decision-making and Management | Z,ZK | 3 |
| Decision-making proot thinking. | ess; identifying exactly what the problem is; evaluating the issue; solving the issue; using multiple perspective analysis to make | e a decision; usual | method of |
| | | | |
| 14MPG | Modern Programming Approaches | KZ | 2 |
| Students will be remin | Modern Programming Approaches nded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and the sics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and la | eir implementation | _ |
| Students will be remine will also try out the base | nded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and the | eir implementation | _ |
| Students will be remined will also try out the base 17GEDS Regional differentiation theoretical and methological. | nded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and the sics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and lateral Geography of Transport Systems on of the transport system. Sociogeographic regionalization and its relation to transport. Transport and local and regional developled framework. Mobility research - travel behavior, mode choice and the influence onto "modal-split." Modal competition. Pra | reir implementation rger data sizes. KZ Dopment. Spatial inte | in Python. The |
| Students will be reminimil also try out the base 17GEDS Regional differentiation theoretical and methologism. | nded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and the sics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and lateral Geography of Transport Systems on of the transport system. Sociogeographic regionalization and its relation to transport. Transport and local and regional developled framework. Mobility research - travel behavior, mode choice and the influence onto "modal-split." Modal competition. Pra | reir implementation rger data sizes. KZ Dopment. Spatial inte | in Python. The |
| Students will be remined will also try out the base of | nded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and the size of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and law Geography of Transport Systems on of the transport system. Sociogeographic regionalization and its relation to transport. Transport and local and regional developled dological framework. Mobility research - travel behavior, mode choice and the influence onto "modal-split." Modal competition. Praction planning. Introduction to Architectural Design cture of traffic systems. Bus and trolley-bus transport. Tramway and town tracks. Design of vehicles. Subway. Railway transport. | eir implementation rger data sizes. KZ ppment. Spatial intectical use of transpo | in Python. The 2 eraction - ort-geographica |
| will also try out the band of | nded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and the size of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and law Geography of Transport Systems on of the transport system. Sociogeographic regionalization and its relation to transport. Transport and local and regional developled dological framework. Mobility research - travel behavior, mode choice and the influence onto "modal-split." Modal competition. Praction planning. Introduction to Architectural Design cture of traffic systems. Bus and trolley-bus transport. Tramway and town tracks. Design of vehicles. Subway. Railway transport. | eir implementation rger data sizes. KZ ppment. Spatial intectical use of transpo | in Python. The 2 eraction - ort-geographica |

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: W1-BK-LOG-25/26

Name of the group: Comp. Sel. Courses Bachelor Part-Time TET-LOG from 2025/26

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 |
|--------|---|------------|---------|-------|----------|------|
| 15W1BO | Work Safety and Health Protection Petr Musil | KZ | 4 | 8 | L | PV |
| 17W1EV | Public Sector Economy | KZ | 4 | 8B | Z | PV |
| 14W1HW | Computer Hardware | KZ | 4 | 8B | L | PV |
| 15W1HE | Work Hygiene and Ergonomics in Traffic Petr Musil | KZ | 4 | 8B | Z | PV |
| 17W1LL | Logistics of Passenger and Freight Air Transport | KZ | 4 | 8B | L | PV |
| 17W1OF | Personal Finance | KZ | 4 | 8 | Z | PV |
| 17W1PM | Personal Management | KZ | 4 | 8 | L | PV |
| 14W1PZ | Advanced Data Processing in Spreadsheets | KZ | 4 | 8B | Z | PV |
| 14W1PJ | C Programming Language | KZ | 4 | 8B | Z | PV |
| 16W1PV | Operation, Construction and Maintenance of Vehicles | KZ | 4 | 8 | L | PV |
| 17W1ST | Titan Simulation | KZ | 4 | 8B | L | PV |
| 17W1SL | Sociology of Human Resources | KZ | 4 | 8 | Z | PV |
| 17W1SK | Urban and Regional Rail Transport Systems | KZ | 4 | 8B | L | PV |
| 14W1UP | Editing of Theses in MS Word | KZ | 4 | 8 | L | PV |

Characteristics of the courses of this group of Study Plan: Code=W1-BK-LOG-25/26 Name=Comp. Sel. Courses Bachelor Part-Time TET-LOG from 2025/26

| 15W1BO | Work Safety and Health Protection | KZ | 4 | |
|---------------------------|--|--------------------|-------------------|--|
| Základní legislativa, vyr | nezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochra | anu zdraví a zdrav | otní zajišt ní na | |
| služebních cestách don | na i v zahrani í, statistika, praxe. | | | |

| 17W1EV | | | |
|---|--|--|---|
| Economic and financis | Public Sector Economy | KZ | 4 |
| | al theory of public sector, public choice theory, externalites, decisions about public finance allocation, economic assesment of | | |
| tax system of the CR, | state budget, management of public projects a their economic efficiency assessment, way of elaboration of PPP projects, fundir | ng from EU funds, p | rogram HDM-4. |
| 14W1HW | Computer Hardware | KZ | 4 |
| Computer architecture | , basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separat | e parts designing - | controllers, |
| arithmetic and logical | units, I/O subsystem. | | |
| 15W1HE | Work Hygiene and Ergonomics in Traffic | KZ | 4 |
| Basic knowledge of or | cupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of thes | e factors on health | of workers. |
| Creation and protectic | n of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology | to possibilities and | skills of a man. |
| Practical examples fro | m the field of transportation; relevant legislature. | | |
| 17W1LL | Logistics of Passenger and Freight Air Transport | KZ | 4 |
| Logistics airline passe | nger and cargo. Aircraft and airport terminals for passenger and cargo transport. Airlines in terms of logistics systems. Aerial | transport process p | passengers and |
| air cargo. Information | systems in air transport. Global distribution systems. | | |
| 17W1OF | Personal Finance | KZ | 4 |
| Personal finance (bud | et, financing of basic living needs), debt (loans and credits, payment instruments, interest and fees, debt trap), financing of h | 1 | gage, savings, |
| consumer loans, refina | uncing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability | and adequacy), see | curing the future |
| (retirement savings an | d insurance). | | |
| 17W1PM | Personal Management | KZ | 4 |
| | group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercu | ıltural communicati | on. |
| 14W1PZ | Advanced Data Processing in Spreadsheets | KZ | 4 |
| | ar with principles of working in a spreadsheet. Graphic layout of the table appearance, formatting of numbers, insertion of form | 1 1 | • |
| | ction. Working with large spreadsheets, filters, advanced filters, database functions. Pivot tables and charts, conditional formatting | | |
| | es and questions from various companies and training. | rig, solution illiang, | , solver, macros, |
| 14W1PJ | · · · · · · · · · · · · · · · · · · · | 147 | |
| 177711 5 | 1 C Programming Language | K/ | 1 |
| C programming langua | C Programming Language | KZ string files structu | 4 ures and unions |
| | ege. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, | 1 | • |
| Implementations of ab | uge. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. | string, files, structu | ires and unions. |
| Implementations of ab | ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise operators. Operation, Construction and Maintenance of Vehicles | string, files, structu | ures and unions. |
| Implementations of about 16W1PV Methods of vehicle pro | ge. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measur | string, files, structu | ures and unions. |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of e | rige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles adduction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurement diagnostics. | KZ ement. Transmission | ures and unions. 4 on mechanism. |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of e 17W1ST | regie. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles adduction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measure angine diagnostics. Titan Simulation | KZ KZ KZ KZ | 4 on mechanism. |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of e 17W1ST Titan is a management | region Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles adduction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measure angine diagnostics. Titan Simulation t game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce. | KZ ement. Transmissio | 4 on mechanism. 4 price and |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of e 17W1ST Titan is a management determine the quantity | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation t game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence. | KZ ement. Transmissio | 4 on mechanism. 4 price and |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of 6 17W1ST Titan is a management determine the quantity of financial corporate | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation t game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the conseque eports and they use this information for other business decisions. | KZ ement. Transmission KZ uct. Students set a nces of their decision | 4 on mechanism. 4 price and ons by the form |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of e 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation t game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same product and capacity of production, plan budgets for marketing, research and development. They become familiar with the conseque reports and they use this information for other business decisions. Sociology of Human Resources | KZ ement. Transmission KZ uct. Students set a noces of their decision KZ | 4 on mechanism. 4 price and ons by the form |
| Implementations of ab 16W1PV Methods of vehicle pro General principles of e 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL Human resources and | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation t game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the conseque eports and they use this information for other business decisions. | KZ ement. Transmission KZ uct. Students set a noces of their decision KZ | 4 on mechanism. 4 price and ons by the form |
| Implementations of ab 16W1PV Methods of vehicle pro- General principles of e 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL Human resources and of the organization. | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation train the business decisions. Lets 2-8 student groups to produce and compete in the market with the same product and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence are they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, | KZ ement. Transmission KZ uct. Students set a nces of their decision KZ human resources p | 4 price and ons by the form 4 planning, culture |
| Implementations of ab 16W1PV Methods of vehicle produced from the principles of a second from the principles of the | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation transport of produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence reports and they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, Urban and Regional Rail Transport Systems | KZ ement. Transmission KZ uct. Students set a nces of their decision KZ human resources p | 4 price and ons by the form 4 planning, culture 4 |
| Implementations of ab 16W1PV Methods of vehicle produced from the principles of an analogement of the produced from the quantity of financial corporate of the organization. 17W1SL Human resources and of the organization. 17W1SK Factors affecting trans | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation transport groups to produce and compete in the market with the same product and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence are they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, Urban and Regional Rail Transport Systems Port demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, | KZ ement. Transmission KZ uct. Students set a noces of their decision KZ human resources p KZ line networking. C | ares and unions. 4 on mechanism. 4 price and ons by the form 4 olanning, culture 4 reating and |
| Implementations of ab 16W1PV Methods of vehicle pro- General principles of e 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL Human resources and of the organization. 17W1SK Factors affecting trans- evaluation of the timet | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation transport of produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence reports and they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, Urban and Regional Rail Transport Systems | KZ ement. Transmission KZ uct. Students set a noces of their decision KZ human resources p KZ line networking. C | 4 price and ons by the form 4 planning, culture 4 reating and |
| Implementations of ab 16W1PV Methods of vehicle progeneral principles of 6 17W1ST Titan is a management determine the quantity of financial corporate in 17W1SL Human resources and of the organization. 17W1SK Factors affecting transevaluation of the timet marketing. | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation transport groups to produce and compete in the market with the same product and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence reports and they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, work group as a special kind of social group, communication, personal management, modern management, able. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport special spe | KZ ement. Transmission KZ uct. Students set a noces of their decision KZ human resources property of the set | ares and unions. 4 on mechanism. 4 price and ons by the form 4 planning, culture 4 reating and he role of |
| Implementations of ab 16W1PV Methods of vehicle progeneral principles of 6 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL Human resources and of the organization. 17W1SK Factors affecting transevaluation of the timet marketing. | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation type described to the same simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence and they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, work group as a special kind of social group, communication, personal management, modern management, able. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport in the same produce and compete in the management, able. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport in the same produce and compete in the management, and they are same produce and compete in the management, and they are same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the ma | KZ ement. Transmission KZ uct. Students set a naces of their decision KZ human resources property of the set of their decision KZ | 4 price and ons by the form 4 planning, culture 4 reating and he role of |
| Implementations of ab 16W1PV Methods of vehicle progeneral principles of 6 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL Human resources and of the organization. 17W1SK Factors affecting transevaluation of the timet marketing. 14W1UP Students will be introde | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation type described to the production, plan budgets for marketing, research and development. They become familiar with the consequence and they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, able. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport Gritans of Theses in MS Word used to the principles of creating and editing large documents and basic typographic rules. They will properly apply styles, creating and editing large documents and basic typographic rules. They will properly apply styles, creating and editing large documents and basic typographic rules. They will properly apply styles, creating and editing large documents and basic typographic rules. | KZ ement. Transmission KZ uct. Students set a naces of their decision KZ human resources property for the set of their decision KZ kZ human resources property for the set of their decision KZ line networking. C port preferences. T | 4 price and ons by the form 4 planning, culture 4 reating and he role of 4 ents, lists of |
| Implementations of ab 16W1PV Methods of vehicle progeneral principles of 6 17W1ST Titan is a management determine the quantity of financial corporate of 17W1SL Human resources and of the organization. 17W1SK Factors affecting transevaluation of the timet marketing. 14W1UP Students will be introdifigures, tables, graphs | Ige. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stract data types (FIFO, LIFO, list), programming techniques (sorting, searching, recursion), using bitwise oprerators. Operation, Construction and Maintenance of Vehicles duction. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measurengine diagnostics. Titan Simulation type described to the same simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequence and they use this information for other business decisions. Sociology of Human Resources their importance, work group as a special kind of social group, communication, personal management, modern management, work group as a special kind of social group, communication, personal management, modern management, able. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport in the same produce and compete in the management, able. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport in the same produce and compete in the management, and they are same produce and compete in the management, and they are same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the market with the same produce and compete in the ma | KZ ement. Transmission KZ uct. Students set a naces of their decision KZ human resources property for the set of their decision KZ kZ human resources property for the set of their decision KZ line networking. C port preferences. T | 4 price and ons by the form 4 planning, culture 4 reating and he role of 4 ents, lists of |

Name of the block: Jazyky

Minimal number of credits of the block: 6

The role of the block: J

Code of the group: JZ-BP-TET-22/23

Name of the group: Bachelor TET (ex LED) 2nd Language Courses from 2022/23

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:

| vote 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 |
| 15JZ3F | Foreign Language - French 3 Irena Veselková | Z | 3 | 0P+4C+10B | Z | J |
| 15JZ3I | Foreign Language - Italian 3 Irena Veselková | Z | 3 | 0P+4C+10B | Z | J |
| 15JZ3N | Foreign Language - German 3 Jana Štikarová, Eva Rezlerová, Martina Navrátilová | Z | 3 | 0P+4C+10B | Z | J |
| 15JZ3R | Foreign Language - Russian 3 Marie Michlová | Z | 3 | 0P+4C+10B | Z | J |
| 15JZ3S | Foreign Language - Spanish 3 Nina Hricsina Puškinová | Z | 3 | 0P+4C+10B | Z | J |

| 15JZ4F | Foreign Language - French 4 Irena Veselková | Z,ZK | 3 | 0P+4C+10B | L | J |
|--------|---|------|---|-----------|---|---|
| 15JZ4I | Foreign Language - Italian 4 | Z,ZK | 3 | 0P+4C+10B | L | J |
| 15JZ4N | Foreign Language - German 4 Jana Štikarová, Eva Rezlerová, Martina Navrátilová | Z,ZK | 3 | 0P+4C+10B | L | J |
| 15JZ4R | Foreign Language - Russian 4 Marie Michlová | Z,ZK | 3 | 0P+4C+10B | L | J |
| 15JZ4S | Foreign Language - Spanish 4 Zuzana Krinková | Z,ZK | 3 | 0P+4C+10B | L | J |

Characteristics of the courses of this group of Study Plan: Code=JZ-BP-TET-22/23 Name=Bachelor TET (ex LED) 2nd Language Courses from 2022/23

| and parcontive and co | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wo | rk with (profession | nal) toyt and its |
|--|---|--|--|
| | ral and written presentation. | ik with (profession | iai) text and it |
| 15JZ3I | Foreign Language - Italian 3 | 7 | 3 |
| | s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of | of language struc | ture knowleda: |
| • | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. World and written form. | | • |
| | ral and written presentation. | u · | , |
| 15JZ3N | Foreign Language - German 3 | Z | 3 |
| Grammar and stylistic | s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement | of language struc | ure knowledge |
| and perceptive and co | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wo | rk with (profession | nal) text and its |
| features. Practice of o | ral and written presentation. | | |
| 15JZ3R | Foreign Language - Russian 3 | Z | 3 |
| Grammar and etylictic | - Coloration of annual control and another in a benefit of the language based and at the form of the Franks because the | | ' |
| Ciaminal and Stylistic | s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of | or language struc | ture knowledge |
| • | s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement to Immunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wo | | • |
| and perceptive and co | | | |
| and perceptive and co | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Wo | | • |
| and perceptive and co features. Practice of o | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. World and written presentation. | rk with (profession | nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. World and written presentation. Foreign Language - Spanish 3 | rk with (profession Z of language struct | nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic and perceptive and confeatures. | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. World and written presentation. Foreign Language - Spanish 3 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of | rk with (profession Z of language struct | nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic and perceptive and confeatures. | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. World and written presentation. Foreign Language - Spanish 3 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of mmunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. World in the language level and study focus at the Faculty. | rk with (profession Z of language struct | nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic and perceptive and confeatures. Practice of of 15JZ4F | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - Spanish 3 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of mmunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. | z of language structrick with (profession | anal) text and its 3 ture knowledge nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic and perceptive and confeatures. Practice of of 15JZ4F Grammar and stylistic | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - Spanish 3 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of mmunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - French 4 | z of language structive with (profession Z,ZK of language structive with (profession Z,ZK of language structive st | 3 ture knowledge nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic and perceptive and confeatures. Practice of of 15JZ4F Grammar and stylistic and perceptive and confeatures and stylistic and perceptive and confeatures. | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - Spanish 3 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of mmunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - French 4 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of the second professional topics based on the language level and study focus at the Faculty. Improvement of the second professional topics based on the language level and study focus at the Faculty. | z of language structive with (profession Z,ZK of language structive with (profession Z,ZK of language structive st | 3 ture knowledge nal) text and its |
| and perceptive and confeatures. Practice of of 15JZ3S Grammar and stylistic and perceptive and confeatures. Practice of of 15JZ4F Grammar and stylistic and perceptive and confeatures and stylistic and perceptive and confeatures. | ommunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - Spanish 3 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of mmunicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Worral and written presentation. Foreign Language - French 4 s. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of the selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of the selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of the selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of the selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of the selection of conversation and professional topics based on the language level and study focus at the Faculty. | z of language structive with (profession Z,ZK of language structive with (profession Z,ZK of language structive st | 3 ture knowledge nal) text and its |

Foreign Language - German 4

features. Practice of oral and written presentation.

Foreign Language - French 3

15JZ3F

Z,ZK

Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of language structure knowledge and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work with (professional) text and its features. Practice of oral and written presentation.

and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work with (professional) text and its

15JZ4R Foreign Language - Russian 4

Z,ZK

Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of language structure knowledge and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work with (professional) text and its features. Practice of oral and written presentation.

15JZ4S Foreign Language - Spanish 4

Z,ZK

Ζ

3

3

Grammar and stylistics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of language structure knowledge and perceptive and communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work with (professional) text and its features. Practice of oral and written presentation.

List of courses of this pass:

| Code | Name of the course | Completion | Credits | |
|--|---|----------------------|--------------|--|
| 11CAL1 | 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. Indefinite integral, Newton integral, Riema | | | | |
| | Riemann integral. First-order differential equations, linear differential equations. | | | |
| 11CAL2 | Calculus 2 | Z,ZK | 5 | |
| Linea | ar differential equations and their systems, differential calculus of functions of several real variables. Riemann integral in Rn. Line and | surface integrals. | • | |
| 11FYZ | Physics | Z,ZK | 5 | |
| | Kinematics, dynamics, Newton's laws, force fields, mechanics of continuum, thermodynamics, introduction to electrostatics and elec | tric current. | ' | |
| 11GIE | Geometry | KZ | 3 | |
| Differential geom | etry of curves - parameterization, the arc of the curve, torsion and curvature, Frenet's trihedron. Kinematics - a curve as a trajectory of | of the motion, the v | elocity, and | |
| | acceleration of a particle moving on a curved path | | | |

| 441.4 | | | |
|---|--|--|---|
| 11LA | 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 | minants and |
| | their applications. Scalar product. Similarity of matrices (eigenvalues and eigenvectors). Quadratic forms and their classificat | ion. | |
| 11LP | Linear Programming | KZ | 3 |
| | problem of linear programming, transcription of some practical problems to the linear programming problems. Simplex and convex po | 1 | |
| 1 officiation of the | solutions, duality principle in linear programming, stability of solution of linear programming problem. | orycura. Ompicx m | striou, basic |
| 44MDD | | 1/7 | 2 |
| 11MDP | 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 | al values using diffe | rencies and |
| | indices. | | |
| 11MSP | 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. | ential and differentia | al equations. |
| Linear and non | nlinear 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. | | |
| 11STAT | Statistics | Z,ZK | 4 |
| Basics of probabi | ility Descriptive statistics Population and sample, limit theorem Point estimate, construction and properties Interval estimates Parame | tric tests Nonparan | netric tests |
| | Regression and correlation analysis | | |
| 11TGA | 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 | | · · · · · · · · · · · · · · · · · · · |
| 12MDE | Transport Models and Transport Excesses | Z,ZK | 3 |
| | traffic flow and methods for their measurement. Models of the traffic flow, communications load, line and urban systems. Theory of qu | | |
| | | | • |
| transport and its a | assessment. Statistical characteristics of transport. Transport excesses, their analysis, the causes, identify and minimize the consequ | ences. Improving c | ı transport |
| | safety and fluency. | | |
| 12PPOK | Designing Roads, Highways and Motorways | KZ | 3 |
| | ownership, maintenance, management and categorization of roads and highways. Curve and transition curve. Sinuosity and standard | - | |
| Range of vision for | stopping and overtaking. Road body - shapes and proportions, bottom and superstructure. Drainage and components of roads. Safe | ty device. Crossing | s, junctions, |
| | intersections. | | |
| 12ZADK | Introduction to Transportation Engineering | Z,ZK | 5 |
| 12ZAR | Introduction to Architectural Design | Z | 3 |
| | d architecture of traffic systems. Bus and trolley-bus transport. Tramway and town tracks. Design of vehicles. Subway. Railway transport | rt. Railwav stations | _ |
| | communications. International airports. | | |
| 12ZPV | Railway Operation | Z,ZK | 4 |
| | l · · · · · · · · · · · · · · · · · · · | | _ |
| Legisiation in failt | way transport. Railway vehicles. Railway signals and signal devices. Railway traffic organisation and operation. Simplified railway traff | ic operation. Railwa | ay veriicles |
| | brakes. Railway vehicles marking. Operation intervals. Theoretical graph of train running. | | |
| 12ZTS | Railway Lines and Stations | Z,ZK | 4 |
| Rail transport. Ra | ailway track geometry parameters. Route layout of railway lines. Railway line construction - railway substructure and superstructure. 🤉 | - | way lines. |
| | Railway control systems in relation to infrastructure. Operating and carriage points. Railway lines net and category. Traction in rail to | transport. | |
| 14ASD | | | |
| 14A3D | Algorithm and Data Structures | KZ | 3 |
| | Algorithm and Data Structures ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo | I | |
| Students will analy | | rithms written using | flowcharts, |
| Students will analy | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo | rithms written using variable, branching, | flowcharts, |
| Students will analy | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo- lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - v | rithms written using variable, branching, | flowcharts, |
| Students will analy and use basic Boo | reproblems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algoritem algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in the list data types (integer, floating point and string) and the list data structure in the list data types (integer, floating point and string). | rithms written using variable, branching, ams. | flowcharts, loops, they |
| Students will analy and use basic Boo | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - Variabase Systems | rithms written using variable, branching, ams. KZ dintegrity of data, | flowcharts, loops, they |
| Students will analy and use basic Boo 14DATS Basic concepts of | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo blean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programatic batabase Systems Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via | rithms written using variable, branching, ams. KZ ad integrity of data, the WWW. | flowcharts, loops, they 2 database |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo blean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining | rithms written using variable, branching, ams. KZ ad integrity of data, the WWW. | flowcharts, loops, they 2 database |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo blean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roes and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquise. | rithms written using variable, branching, ams. KZ and integrity of data, the WWW. KZ sition systems for designed. | flowcharts, loops, they 2 database 2 ata mining, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo blean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisitios of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar | rithms written using variable, branching, ams. KZ and integrity of data, the WWW. KZ sition systems for designed. | flowcharts, loops, they 2 database 2 ata mining, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in their program in the process of database systems. Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roes and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. | rithms written using variable, branching, ams. KZ and integrity of data, the WWW. KZ sition systems for data occur. | flowcharts, loops, they 2 database 2 ata mining, networks). |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in their program in the process of database systems. Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches | rithms written using variable, branching, ams. KZ and integrity of data, the WWW. KZ sition systems for data ocb., using neural | flowcharts, loops, they 2 database 2 ata mining, networks). |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be re | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in their program in the process of database systems. Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their in the process of the programming and their in the process of the programming and their in the process of t | rithms written using variable, branching, ams. KZ and integrity of data, the WWW. KZ sition systems for data ocb., using neural | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also to | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in their program in the process of database systems. Solved the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their intry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and programming and their introductions. | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Isition systems for data on cob., using neural on Fand larger data size | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They is. |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also the 14PRG | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via patamining reces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches Modern Programming and their intry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller a Programming Programm | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Isition systems for do noob., using neural KZ Implementation in Fand larger data size | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They is. 2 |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also the 14PRG The Course Program and use basic Boo 14PRG | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in their programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in the programming and their integer, floating point and string) and the list data structure in their programming and their integers, floating point and string and the list data structure in their programming and their integers are precised as a special programming and their integers and knowledge, data warehouses and old programming and their integers and knowledge, data warehouses and old programming and their integers and constructs from object-oriented programming and their integers of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programming and their programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programming to the programming and their programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programming to the programming and their programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programming to the programming and their programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Isition systems for data on cob., using neural on Fand larger data size on KZ mming language is | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They as. 2 expanded |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also the 14PRG The Course Program and use basic Boo 14PRG | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in the programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in the programming and the list data structure in their program in the programming and the list data structure in their program in the programming and the list data structure in their programming and the list data structure in their programming and the list data structure in their program in the programming and the list data structure in their programming and the list data structure in their programming and the list data structure in their programming and the list data structure in the programming and the list data structure in their programming and the list data structure in their program in the programming and the list data structure in their programming and the list data structure in their programming and the list data structure in their program in the programming and the list data structure in their programming | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Isition systems for data on cob., using neural on Fand larger data size on KZ mming language is | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They as. 2 expanded |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also the 14PRG The Course Program and use basic Boo 14PRG | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programming learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via patamining reces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches Modern Programming Approaches Modern Programming and their introduced to some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their introduction of the Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller approaches Programming und the Python programming to the Python programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programming tramming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Isition systems for data on cob., using neural cob. KZ Implementation in Fand larger data size cobing, tuples, sets, consideration in the cobing to the cobing tuples, sets, consideration in the cobing tuples. | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They as. 2 expanded |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also the 14PRG The Course Program and use basic Boo 14PRG | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algorithm algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in the programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program in the programming and the list data structure in their program in the programming and the list data structure in their program in the programming and the list data structure in their programming and the list data structure in their programming and the list data structure in their program in the programming and the list data structure in their programming and the list data structure in their programming and the list data structure in their programming and the list data structure in the programming and the list data structure in their programming and the list data structure in their program in the programming and the list data structure in their programming and the list data structure in their programming and the list data structure in their program in the programming and the list data structure in their programming | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Isition systems for data on cob., using neural on Fand larger data size on KZ mming language is | flowcharts, loops, they 2 database 2 ata mining, networks). 2 ython. They as. 2 expanded |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also tender the course Progenter so that the part of 14W1HW | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo plean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining reces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their in the process of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller and programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python program riticipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob. KZ Implementation in Pand larger data size cob. KZ Imming language is ching, tuples, sets, with the control of the cob. | flowcharts, loops, they 2 database 2 ata mining, networks). 2 cython. They es. 2 expanded dictionaries, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also tender the Course Progenter so that the part of 14W1HW | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algoritem algoritem to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program Database Systems of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security ar queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining rose and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquistics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their intry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller at Programming pramming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programiticipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob. KZ Implementation in Pand larger data size cob. KZ Imming language is ching, tuples, sets, with the control of the cob. | flowcharts, loops, they 2 database 2 ata mining, networks). 2 cython. They es. 2 expanded dictionaries, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also t 14PRG The Course Proghere so that the pa | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their progration of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total mining concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their is rry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller at Programming ramming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python program riticipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware ecture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separate arithmetic and logical units, I/O subsystem. | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob. KZ Implementation in Pand larger data size cob. KZ Imming language is ching, tuples, sets, with the control of the cob. | flowcharts, loops, they 2 database 2 ata mining, networks). 2 cython. They es. 2 expanded dictionaries, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part of 14W1HW Computer architet | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algoritem algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their progration of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisitions of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their is rry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller at Programming pramming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python program tricipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware ecture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separate arithmetic and logical units, I/O subsystem. C Programming Language | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob. KZ Implementation in Pand larger data size ching, tuples, sets, with the cobre c | flowcharts, loops, they 2 database 2 ata mining, networks). 2 rython. They es. 2 expanded dictionaries, 4 ontrollers, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part of 14W1HW Computer architet | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their progration of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total mining concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their is rry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller at Programming ramming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python program riticipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware ecture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separate arithmetic and logical units, I/O subsystem. | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob. KZ Implementation in Fland larger data size ching, tuples, sets, with the cobress of the cob | flowcharts, loops, they 2 database 2 ata mining, networks). 2 rython. They es. 2 expanded dictionaries, 4 ontrollers, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1HW Computer architet 14W1PJ C programming land | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo- lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their progration of database Systems of database Systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roes and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquistics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minided of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their in try out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller are remaining builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python programiticipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware ecture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separate arithmetic and logical units, I/O subsystem. C Programming Language guage. Preprocessor, basics of the C language (data types, syntax, commands), | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob., using neural cob. KZ Implementation in Fand larger data size cobing, tuples, sets, cobing, tuples, sets, cobing, tuples, sets, cobing, files, structures prerators. | flowcharts, loops, they 2 database 2 ata mining, networks). 2 rython. They es. 2 expanded dictionaries, 4 ontrollers, 4 and unions. |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also to 14PRG The Course Proghere so that the parameter architetory and the parameter architectory architectory architectory architectory and the parameter architectory | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their progration of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining rose and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquistics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., using neural cob. KZ Implementation in Fand larger data size cobing, tuples, sets, cobing, tuples, sets, cobing, files, structures prerators. KZ KZ KZ KZ KZ KZ KZ KZ KZ K | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They es. 2 expanded dictionaries, 4 ontrollers, 4 and unions. |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characteris 14MPG Students will be rewill also to 14PRG The Course Proghere so that the parameter archite 14W1PJ Computer archite 14W1PJ C programming land 14W1PZ Students will be | The problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total sand knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for on cob., using neural cob., using neural cob., using neural cob. KZ Implementation in Fand larger data size cobing, tuples, sets, cobing, tuples, sets, cobing, files, structures prerators. KZ Ulas and functions, | flowcharts, loops, they 2 database 2 ata mining, networks). 2 rython. They ess. 2 expanded dictionaries, 4 ontrollers, 4 and unions. 4 including |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1PU Computer architet 14W1PJ C programming lant 14W1PZ Students will be | The problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining To patamining To patamining To patamining To concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their irry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller are programming builds on and fully extends the course 14ASD (Algorithmization and Data Structures). The knowledge of the Python program tricipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware secture, basics of logical circuits design and their realization using FPGA. In detail, description of computer architecture and separate arithmetic and logical units, I/O subsystem. C Programming Language squage. Preprocessor, basics of the C language (data types, syntax, commands), functions, pointes, dynamical memory allocation, stri Implementations of abstract data types (FIFO, LIFO, lis | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for on cob., using neural cob., using neural cob., using neural cob. KZ Implementation in Fand larger data size cobing, tuples, sets, cobing, tuples, sets, cobing, files, structures prerators. KZ Ulas and functions, | flowcharts, loops, they 2 database 2 ata mining, networks). 2 rython. They ess. 2 expanded dictionaries, 4 ontrollers, 4 and unions. 4 including |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1PU Computer architet 14W1PJ C programming lant 14W1PZ Students will be addressing, error data | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constructs in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programing language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining roces and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisitics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for on cob., using neural cob., using neural cob., using neural cob. KZ Implementation in Found larger data size cobing, tuples, sets, cobing, tuples, sets, cobing, files, structures prerators. KZ Ulas and functions, solution finding, solution finding, solution | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 and unions. 4 including ver, macros, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1HW Computer architect 14W1PJ C programming land 14W1PZ Students will be addressing, error december 14W1UP | The problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo-lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programily learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquisitions of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their ir yo ut the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller any out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller arroy out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller arroy out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller arroy out the basics of working with data and time, regular expressions, functions and Data Structures). The knowledge of the Python program ricipant gains skills and can apply them t | rithms written using variable, branching, ams. KZ Id integrity of data, the WWW. KZ Sition systems for data cob., using neural cob., sching, tuples, sets, cob., using language is cob., using neural cob., using | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 including ver, macros, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1HW Computer architect 14W1PJ C programming land 14W1PZ Students will be addressing, error descriptions. | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programing language in the problems, some problems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining resea and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquistics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Sition systems for on cob., using neural | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 and unions. 4 ts, lists of |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1HW Computer architect 14W1PJ C programming land 14W1PZ Students will be addressing, error descriptions. | ze problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programing language in the principles of patch and string and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining trees and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquistics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesian Prediction, Cluster analysis, Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Sition systems for on cob., using neural | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 and unions. 4 ts, lists of |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1PU Computer architect 14W1PJ C programming land 14W1PZ Students will be addressing, error defigures, tables, grant 14W1UP Students will be figures, tables, grant 14W1UP Students will be figures, tables, grant 14W1UP | Leg problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programing language in the process of which variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total part of the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their ir ry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller is ry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller is ry out the basics of working with date and time, regular expressions, functions and Data Structures). The knowledge of the Python program retricipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware acture, basics of logical circuits design and their realization using FPGA. In detail, description o | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Sition systems for on cob., using neural cob., using language is ching, tuples, sets, cob., using language is ching, tiples, structures prerators. KZ ulas and functions, solution finding, solution finding, solution finding dissertations | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 and unions. 4 ts, lists of and theses, |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1HW Computer architect 14W1PJ C programming land 14W1PZ Students will be addressing, error do 14W1UP Students will be figures, tables, grain 15JZ1A | Lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programillar of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security ar queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via patamining cross and knowledge, data warehouses and OLAP technology for data mining, data preprocessing in the process of knowledge acquistics of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesian Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches Modern Programming Approaches Modern Programming Approaches Programming Programm | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Sition systems for on cob., using neural cob., using language is ching, tuples, sets, cob., using language is ching, tuples, sets, sching, tuples, sets, using language is cob., using neural | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 including ver, macros, 4 ts, lists of and theses, 3 |
| Students will analy and use basic Boo 14DATS Basic concepts of 14DMG Types of data sour mining characterist 14MPG Students will be rewill also to 14PRG The Course Proghere so that the part 14W1HW Computer architect 14W1PJ C programming land 14W1PZ Students will be addressing, error do 14W1UP Students will be figures, tables, grain 15JZ1A | Leg problems, design a theoretical solution to a given problem and write the resulting algorithm using flowcharts, practice reading algo lean algebra to construct constraints in algorithms. Students will be introduced to the basics of the Python programming language - will learn to work with variables of basic data types (integer, floating point and string) and the list data structure in their programing language in the process of which variables of basic data types (integer, floating point and string) and the list data structure in their program of database systems, conceptual model, relational data model, the principles of normal forms, relational database design, security are queries, relational algebra, SQL language, client / server, multilayer architectures, distributed database systems. Access to data via Datamining Total part of the process of knowledge acquisities of concepts (classes), mining association rules from relational db. and data warehousing, classification (decisions tree, Bayesiar Prediction. Cluster analysis. Mining in complex structured data, multimedia dbf., www. Modern Programming Approaches minded of some aspects of Pythom programming, learn basic concepts and constructs from object-oriented programming and their ir ry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller is ry out the basics of working with data libraries in Python, namely NumPy, Pandas, Matplotlib, and practice with examples of smaller is ry out the basics of working with date and time, regular expressions, functions and Data Structures). The knowledge of the Python program retricipant gains skills and can apply them to solve various follow-up tasks. Main topics: lists, multidimensional arrays, sorting and searce working with date and time, regular expressions, functions and procedures, working with files (CSV, JSON, XML). Computer Hardware acture, basics of logical circuits design and their realization using FPGA. In detail, description o | rithms written using variable, branching, ams. KZ Ind integrity of data, the WWW. KZ Sition systems for on cob., using neural cob., using language is cob., using neural cob., u | flowcharts, loops, they 2 database 2 ata mining, networks). 2 yython. They as. 2 expanded dictionaries, 4 ontrollers, 4 including ver, macros, 4 ts, lists of and theses, 3 |

| 15JZ2A | | · · | |
|---|--|---|---|
| | Foreign Language - English 2 ures and style. Selection of conversation topics relating to transportation sciences. Extending vocabulary, developing perceptive and con | Z,ZK nmunicative skills | 3 |
| ammatical of ac | stylistics forms. Oral and written presentation of original research. Academic text principles and reading comprehension. Principles o | | . Lioinona |
| 15JZ3F | 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 | | |
| nd perceptive an | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w features. Practice of oral and written presentation. | /ith (professional) | text and |
| 15JZ3I | 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 | | - |
| ind perceptive an | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w | vith (professional) | text and |
| | features. Practice of oral and written presentation. | | |
| 15JZ3N | Foreign Language - German 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 w | | |
| ina perceptive an | features. Practice of oral and written presentation. | nui (proicessional) | text and |
| 15JZ3R | Foreign Language - Russian 3 | Z | 3 |
| Frammar and sty | istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la | inguage structure | knowled |
| nd perceptive ar | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w | vith (professional) | text and |
| | features. Practice of oral and written presentation. | | |
| 15JZ3S | Foreign Language - Spanish 3 | Z | 3 |
| · - | istics. Selection of conversation and professional topics based on the language level and study focus at the Faculty. Improvement of la | | |
| nd perceptive an | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w features. Practice of oral and written presentation. | niii (proiessionai) | lext and |
| 15JZ4F | 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 | | _ |
| nd perceptive ar | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w | vith (professional) | text and |
| | features. Practice of oral and written presentation. | | 1 |
| 15JZ4I | 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 | | |
| na perceptive an | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w features. Practice of oral and written presentation. | ith (professional) | text and |
| 15JZ4N | 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 an | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w | vith (professional) | text and |
| 15JZ4R | features. Practice of oral and written presentation. Foreign Language - Russian 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 | • | 1 |
| ' - ' | d communicative skills, vocabulary development. Basic stylistic forms. Presentation of own knowledge in oral and written form. Work w | | |
| | features. Practice of oral and written presentation. | | |
| 15JZ4S | Foreign Language - Spanish 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 w | .td= /f!!\ | |
| ind perceptive ar | | vith (professional) | |
| | features. Practice of oral and written presentation. | | text and |
| 15W1BO | features. Practice of oral and written presentation. Work Safety and Health Protection | KZ | text and |
| 15W1BO | features. Practice of oral and written presentation. | KZ | text and |
| 15W1BO | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm, rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav. Programy na ochranu z | KZ | text and |
| 15W1BO ákladní legislativa 15W1HE | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm, rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav. Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. | KZ zdraví a zdravotní KZ | text and 4 i zajišt n |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po | KZ zdraví a zdravotní KZ actors on health d | text and 4 i zajišt n 4 of worker |
| 15W1BO ákladní legislativi 15W1HE Basic knowledge reation and prote | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. | KZ zdraví a zdravotní KZ actors on health o essibilities and ski | text and 4 2 zajišt n 4 of worker Ils of a m |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge reation and prote | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology | KZ zdraví a zdravotní KZ actors on health o essibilities and skil | text and 4 i zajišt n 4 f worker Ils of a m |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge reation and prote | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de | KZ zdraví a zdravotní KZ actors on health o ssibilities and skil KZ esign. Drive. Elect | text and 4 i zajišt ni 4 of worker lls of a m |
| 15W1BO ákladní legislativi 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. | KZ zdraví a zdravotní KZ actors on health o assibilities and skil KZ esign. Drive. Elect Safety. | text and 4 i zajišt ni 4 of worker Ils of a m |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles | KZ zdraví a zdravotní KZ actors on health o essibilities and skil KZ esign. Drive. Elect Safety. Z | text and 4 i zajišt ni 4 of worker ills of a m 2 tric tractic |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. | KZ zdraví a zdravotní KZ actors on health o essibilities and skil KZ esign. Drive. Elect Safety. Z | text and 4 i zajišt ní 4 of workers Ils of a m 2 tric tractic |
| 15W1BO dikladní legislativa 15W1HE Basic knowledge reation and prote 16DPO dehicle. Functions | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water | KZ zdraví a zdravotní KZ actors on health o essibilities and skil KZ esign. Drive. Elect Safety. Z | text and 4 i zajišt ni 4 of worker ills of a m 2 tric tractic |
| 15W1BO akladní legislativa 15W1HE Basic knowledge reation and prote 16DPO ehicle. Functions 16UDOP ehicles and trans | features. Practice of oral and written presentation. Work Safety and Health Protection A, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water of transport. Lifting equipment and conveyors. Legislation. Operation, Construction and Maintenance of Vehicles e production. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measureme | KZ zdraví a zdravotní KZ actors on health o ssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna | 4 azajišt ni 4 bri varjišt ni 4 bri varker ills of a mi 2 tric tractic 2 ative mea |
| 15W1BO akladní legislativa 15W1HE Basic knowledge reation and prote 16DPO ehicle. Functions 16UDOP ehicles and trans 16W1PV lethods of vehicle | features. Practice of oral and written presentation. Work Safety and Health Protection A vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water of transport. Lifting equipment and conveyors. Legislation. Operation, Construction and Maintenance of Vehicles e production. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measureme General principles of engine diagnostics. | KZ zdraví a zdravotní KZ actors on health o sssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna KZ ent. Transmission r | 4 di zajišt n 4 |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV /ethods of vehicle | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage do Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water of transport. Lifting equipment and conveyors. Legislation. Operation, Construction and Maintenance of Vehicles e production. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measureme General principles of engine diagnostics. Economics of Transport Company | KZ zdraví a zdravotní KZ actors on health o sssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna KZ ent. Transmission r Z,ZK | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV /lethods of vehicle | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm, rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav. Programy na ochrana z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage do Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water of transport. Lifting equipment and conveyors. Legislation. Operation, Construction and Maintenance of Vehicles e production. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measureme General principles of engine diagnostics. Economics of Transport Company all utility, marginal costs, function of supply and demand, market equilibrium, perfect competition and types of market arrangement. Transport competition and types of market arrangement. | KZ zdraví a zdravotní KZ actors on health o sssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna KZ ent. Transmission r Z,ZK ensportation marke | text and 4 i zajišt ni 4 f vorker lls of a m 2 tric tractic 2 ative mea |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge treation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV /ethods of vehicle 17EPOD Economy, margina | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochrana zdraví zejména v dopraví . Programy na ochrana zdraví zejména v dopraví . Programy na ochrana zdraví zejména v dopraví zejména v dopr | KZ zdraví a zdravotní KZ actors on health o sssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna KZ ent. Transmission r Z,ZK ensportation marke ort. | text and 4 i zajišt ni 4 f yajišt ni 4 f yajišt ni 2 tric tractic 2 ative mea 4 mechanis |
| 15W1BO ákladní legislativi 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV /ethods of vehicle 17EPOD /conomy, margina | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochrana zdraví zejména v dopraví zejména zejména zejména zdraví zej | KZ zdraví a zdravotní KZ factors on health o pssibilities and skil KZ esign. Drive. Elect Safety. Z r transport. Alterna KZ ent. Transmission r Z,ZK nsportation marke ort. Z,ZK | text and 4 zajišt ni 4 f zajišt ni 4 f worker Ils of a m 2 tric tractic 2 ative mea 4 mechanis 6 et, transp |
| 15W1BO ákladní legislativi 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV /ethods of vehicle 17EPOD /conomy, margina | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm , rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav . Programy na ochrana zdraví zejména v dopraví . Programy na ochrana zdraví zejména v dopraví . Programy na ochrana zdraví zejména v dopraví zejména v dopr | KZ zdraví a zdravotní KZ factors on health o pssibilities and skil KZ esign. Drive. Elect Safety. Z r transport. Alterna KZ ent. Transmission r Z,ZK nsportation marke ort. Z,ZK | text and 4 zajišt ní 4 f vajišt ní 4 f workers Ils of a m 2 tric tractic 2 ative mea 4 mechanis 6 et, transp |
| 15W1BO ákladní legislativa 15W1HE Basic knowledge creation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV //ethods of vehicle 17EPOD Economy, margina 17ESYS lacroeconomics, | features. Practice of oral and written presentation. Work Safety and Health Protection A, vymezení pojm, rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav. Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these fiction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to po Practical examples from the field of transportation; relevant legislature. Wehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water of transport. Lifting equipment and conveyors. Legislation. Operation, Construction and Maintenance of Vehicles production. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measureme General principles of engine diagnostics. Economics of Transport Company If utility, marginal costs, function of supply and demand, market equilibrium, perfect competition and types of market arrangement. Transport Systems Economy nacroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its of transport, system. | KZ zdraví a zdravotní KZ factors on health o pssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna KZ ent. Transmission r Z,ZK nsportation marke ort. Z,ZK s quantification, ra | text and 4 zajišt ní 4 f vajišt ní 4 f vorkers Ils of a m 2 tric tractic 2 ative mea 4 mechanis 6 et, transp |
| 15W1BO ákladní legislativi 15W1HE Basic knowledge reation and prote 16DPO /ehicle. Functions 16UDOP /ehicles and trans 16W1PV /ethods of vehicle 17EPOD /cconomy, margina 17ESYS acroeconomics, 1 | features. Practice of oral and written presentation. Work Safety and Health Protection a, vymezení pojm, rizika a možná poškození zdraví, pracovní podmínky a ochrana zdraví zejména v doprav. Programy na ochranu z služebních cestách doma i v zahrani í, statistika, praxe. Work Hygiene and Ergonomics in Traffic of occupational hygiene and ergonomics, and their application in transport. Working environment factors, and the influence of these faction of working conditions that do not damage public health. Mutual links: man-machine-environment. Adaptation of technology to pore practical examples from the field of transportation; relevant legislature. Vehicle Technology , principles. Drive, vehicle construction. Road transport, safety, heavy duty vehicle desing, dynamics. Rail transport, safety, carriage de Transshipment. Technological components of various modes of transport. Management and control of various means of transport. Introduction into Vehicles portation systems. Functionality and setup. Movement and drive principles. Engines and their characteristics. Rail, road, air and water of transport. Lifting equipment and conveyors. Legislation. Operation, Construction and Maintenance of Vehicles e production. Vehicle maintenance. Vehicle diagnostics. Maintenance and repair plans. Engine maintenance and emission measureme General principles of engine diagnostics. Economics of Transport Company I utility, marginal costs, function of supply and demand, market equilibrium, perfect competition and types of market arrangement. Transport Systems Economy Transport Systems Economy macroeconomic indicators, transport system, transport externalities, energy in transport, shared economy, state transport system and its | KZ zdraví a zdravotní KZ factors on health o pssibilities and skil KZ esign. Drive. Elect Safety. Z transport. Alterna KZ ent. Transmission r Z,ZK ensportation marke fort. Z,ZK s quantification, ra Z,ZK | text and 4 zajišt ní 4 drovensky do a m 2 tric tractic 2 ative mea 4 mechanis 6 et, transp |

| - | | | |
|--|--|--|--|
| - | Geography of Transport Systems | KZ | 2 |
| neoretical and meth | ntiation of the transport system. Sociogeographic regionalization and its relation to transport. Transport and local and regional develop | • | |
| | odological framework. Mobility research - travel behavior, mode choice and the influence onto "modal-split." Modal competition. Practical | I use of transport- | -geographic |
| | analysis in transportation planning. | | |
| 17IVED | 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 organ | nizational structures of integrated public transport systems, internal and external bindings, contracting, carriage relations, conditions of | of both rail and b | us transpo |
| | operations, grading and quality, IS, marketing. | | |
| 17KLID | Quality in Transport Service | Z,ZK | 3 |
| | ion of quality, standards and international standardization, integrated management systems, modern attitudes of quality managemen | | |
| • | ds of quality measurement, quality management, risks and opportunities, public transport quality, view of costumers, carriers and PT- | | - |
| | quality costs, marketing and costumer satisfaction. | 3, | , |
| 17LGT | Logistics | Z,ZK | 6 |
| | basic concepts, store, warehouse, transport and handling equipment, logistics technology, logistics centers, information and intellige | | 1 |
| ogistics definition, | | ili logistics syste | ins, iogisii |
| 4714400 | city. | 1/7 | |
| 17MAGD | Marketing in Transport | KZ | 4 |
| • | rategic marketing plans. Implementation of marketing campaigns. Branding and brand promotion. Public relations industry, business a | | |
| development, sear | ch engine optimization. Government relations and industry organization lobbying. Advertising and strategic sponsorships. Multimedia | presentations ar | nd corporat |
| | videos. Direct marketing and related lead generation campaigns. | | |
| 17MRRK | Managerial Decision-making and Management | Z,ZK | 3 |
| Decision-making | process; identifying exactly what the problem is; evaluating the issue; solving the issue; using multiple perspective analysis to make a | a decision; usual | method of |
| | thinking. | | |
| 17NAPR | Freight Traffic | Z | 2 |
| | Freight traffic and transportation system, conditions of implementation, forwarding. | _ | _ |
| 17TEDY | | KZ | 4 |
| 17TEDK | Transport Technology and Logistics | | |
| | sport technology and logistics, particular steps of transport planning, line planning, timetabling, planning in pasanger and freight trans | | |
| | odus, technologic factors of the side of operator and client, organisation of city transport, logistic technologies and their aplication usin | | _ |
| 17TVD | Technology of Public Transport | Z,ZK | 5 |
| The course conter | nts a detailed description of new knowledge and basic principles of hierarchical planning of public transport system accenting the ger | neral transport pl | anning and |
| | quantified transport demand. The course would be oriented on multiple and multi-level optimisation of passenger public transport s | system. | |
| 17W1EV | Public Sector Economy | KZ | 4 |
| | cial theory of public sector, public choice theory, externalites, decisions about public finance allocation, economic assesment of publi | ic projects (CBA. | MCA. CE |
| | R, state budget, management of public projects a their economic efficiency assessment, way of elaboration of PPP projects, funding fro | | |
| 17W1LL | Logistics of Passenger and Freight Air Transport | KZ | 4 |
| | | | |
| ogistics affiline pas | senger and cargo. Aircraft and airport terminals for passenger and cargo transport. Airlines in terms of logistics systems. Aerial trans air cargo. Information systems in air transport. Global distribution systems. | sport process pas | ssengers ar |
| 47)4/405 | | 1/7 | |
| 17W1OF | Personal Finance | KZ | 4 |
| | oudget, financing of basic living needs), debt (loans and credits, payment instruments, interest and fees, debt trap), financing of hous | | · . |
| · | | ing (rent, mortga | - |
| · | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a | ing (rent, mortga | - |
| onsumer loans, ref | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). | ing (rent, mortga adequacy), secur | - |
| onsumer loans, ref | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management | ing (rent, mortga adequacy), secur KZ | ing the futu |
| onsumer loans, ref | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). | ing (rent, mortga adequacy), secur KZ | ing the futu |
| onsumer loans, ref | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercent | ing (rent, mortga adequacy), secur KZ cultural communi | ing the futu |
| 17W1PM Human source | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurban and Regional Rail Transport Systems | ing (rent, mortga adequacy), secur KZ cultural communi KZ | the future 4 cation. |
| 17W1PM Human source 17W1SK Factors affecting | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercontrol of the control of | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr | ting the future 4 cation. |
| 17W1PM Human source 17W1SK Factors affecting | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurban and Regional Rail Transport Systems | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr | ting the futured and the futured and the future and |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure under the control of | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T | d cation. 4 cation. 4 reating and the role of |
| 17W1PM Human source 17W1SK Factors affecting evaluation of the | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, intercedure, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedur | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T | 4 cation. 4 reating and the role of |
| 17W1PM Human source 17W1SK Factors affecting evaluation of the | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedure, work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern management, human special work group as a special kind of social group, communication, personal management, modern | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T | 4 cation. 4 reating and the role of |
| 17W1PM Human source 17W1SK Factors affecting evaluation of the 17W1SL uman resources a | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedures, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedures, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercedures, work group as a special kind of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Indicate the properties of the properties of the properties of the organization. | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T | 4 cating and the role of 4nning, culture. |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL uman resources a | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercest uransport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ an resources plan | 4 cating and the role of 4nning, cultured |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources a 17W1ST Titan is a manag | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurbed by transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce. | KZ cultural communi KZ ne networking. Cr ort preferences. T KZ an resources plan KZ cut. Students set a | 4 cation. 4 reating and the role of 4 nning, cultur |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources a 17W1ST Titan is a manag | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurbed by transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences | KZ cultural communi KZ ne networking. Cr ort preferences. T KZ an resources plan KZ cut. Students set a | 4 cation. 4 reating and the role of 4 nning, cultur |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL uman resources a 17W1ST Titan is a manag | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurbed by transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce. | KZ cultural communi KZ ne networking. Cr ort preferences. T KZ an resources plan KZ cut. Students set a | 4 cation 4 deating and the role of 4 deating, cultured 4 deating and 4 d |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL uman resources a 17W1ST Titan is a manag | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurbed by transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences | KZ cultural communi KZ ne networking. Cr ort preferences. T KZ an resources plan KZ cut. Students set a | 4 cation 4 deating and the role of 4 deating, cultured 4 deating and 4 d |
| 17W1PM Human source 17W1SK Factors affecting revaluation of the 17W1SL uman resources a 17W1ST Titan is a managetermine the quan | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ an resources plan KZ ct. Students set a of their decision | 4 cation. 4 reating and the role of 4 cation. 4 reprice and s by the for |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL luman resources a 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercesting transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productive and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cropt preferences. T KZ an resources plan KZ ct. Students set a of their decision Z Z,ZK | 4 cation. 4 reating and the role of 4 nning, culturally a price and s by the for 2 |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources a 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY asic course of mat | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interces of the production of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Inditing the production of the production of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same production and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure. | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the n | 4 cation. 4 reating and the role of 4 cation. 4 reating and the role of 4 cation, cultured and s by the for 2 cation and attention attention. |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources a 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY asic course of mat | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productive and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com- | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the n | 4 cation. 4 reating and the role of 4 cation. 4 reating and the role of 4 cation, cultured and s by the for 2 cation and attention attention. |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Ituman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY assic course of mates paid to metals as | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercest urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transpormarketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce tity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructur the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the naposites. Attention | 4 cation. 4 cation. 4 reating and The role of 4 cation. 4 reating and The role of 2 cation. 2 cation. 4 cation. 5 cation. 6 cation. 6 cation. 6 cation. |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources at 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY Jasic course of mates paid to metals as | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercest transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructur the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the n pposites. Attention Z,ZK | 4 cation. 4 cation. 4 reating and The role of 4 cation. 4 price and s by the for 2 cation and a stention is also pa |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources at 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY asic course of mates paid to metals as | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productify and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and come to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, botted and company in the process of the p | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the n pposites. Attention Z,ZK | 4 cation. 4 cation. 4 reating and The role of 4 cation. 4 price and s by the for 2 cation and a stention is also parts. |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources at 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY asic course of mates paid to metals as | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercest transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructur the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the maposites. Attention Z,ZK nd welded joints | 4 cation. 4 cation. 4 reating and The role of 4 cation. 4 price and s by the for 2 cation and a stention is also pa |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL Juman resources at 17W1ST Titan is a manage etermine the quan 17ZAP 18MTY asic course of mates paid to metals as | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productify and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and come to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, botted and company in the process of the p | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the n pposites. Attention Z,ZK | 4 cation. 4 cation. 4 reating and The role of 4 cation. 4 price and s by the for 2 cation and a stention is also pa |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL luman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY asic course of mates paid to metals as 18PZP ension and compressions. | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productify and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructur the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and come to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Torsion of circular cross sections. Combined loading. Stability. | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the naposites. Attention Z,ZK and welded joints Z,ZK | 4 cation. 4 cation. 4 reating and The role of 4 cation. 4 price and s by the for 3 cation attention is also part of structure. |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL luman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY asic course of mates paid to metals as 18PZP ension and compression and compression and compression and compression and system of | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurved by the same personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurved by the same personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercurved by the same personal ransport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Indicate the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength Elasticity and Arnalysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Torsion of circular cross sections. Combined loading. Stability. | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the naposites. Attention Z,ZK and welded joints Z,ZK be beams and simple additional communications. | 4 cation. 4 cation. 4 reating and the role of the role of the role of the role and the role an |
| 17W1PM Human source 17W1SK Factors affecting to evaluation of the 17W1SL luman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY asic course of mates paid to metals as 18PZP ension and compression and compression and compression and compression and system of | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, intercent of the organization of plans and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, lire timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productive and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and come to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Design and analysis of cross sections. Combined loading. Stability. Structural Analysis If forces in plane and space. Calculation of reactions of bodies and structures. Assessment of internal forces on sta | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the naposites. Attention Z,ZK and welded joints Z,ZK be beams and simple additional communications. | 4 cation. 4 cation. 4 reating and the role of the role of the role of the role and the role an |
| 17W1PM Human source 17W1SK Factors affecting revaluation of the 17W1SL uman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY asic course of matic paid to metals as 18PZP ension and compression and compressi | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources A Sociology of Human Resources Sociology of Human Resources In their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Torsion of circular cross sections. Combined loading. Stability. Structural Analysis forces in plane and space. Calculation of reactions of statically determinate system | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a of their decision Z Z,ZK re. However the n reposites. Attention Z,ZK nd welded joints Z,ZK re beams and simple cross-sectional c | 4 cation. 4 cation. 4 reating and the role of the ro |
| 17W1PM Human source 17W1SK Factors affecting revaluation of the 17W1SL uman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY asic course of mater paid to metals as 18PZP ension and compression and compressi | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, lire timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transpormarketing. Sociology of Human Resources Sociology of Human Resources and their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productive and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Torsion of circular cross sections. Combined loading. Stability. Structural Analysis f forces in plane and space. Calculation of reactions of statically determinate systems. Determination of axial force | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set a cof their decision Z Z,ZK re. However the naposites. Attention Z,ZK re. de deams and simple cross-sectional company | 4 cation. 4 cation. 4 reating and the role of the ro |
| 17W1PM Human source 17W1SK Factors affecting revaluation of the evaluation of the 17W1SL luman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY asic course of mates paid to metals as 18PZP ension and compression and compre | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interc Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, line timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transport marketing. Sociology of Human Resources Ind their importance, work group as a special kind of social group, communication, personal management, modern management, humor of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same produce tity and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructur the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and come to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Torsion of circular cross sections. Combined loading. Stability. Structural Analysis forces in plane and space. Calculation of reactions of bodies and structures. Assessment of internal forces on statically determinate ork. Kinem | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Cr ort preferences. T KZ can resources plan KZ ct. Students set at of their decision Z Z,ZK re. However the naposites. Attention Z,ZK re. de welded joints Z,ZK re. beams and simple cross-sectional cross-se | 4 cation. 4 cation. 4 reating and the role of 4 cation. 4 reating and the role of 5 cation. 4 price and s by the for 5 cation and attention is also part of structure 4 cation is also part of structure 4 cation is also part of structure 5 cation is also part of structure 6 cation is also part |
| 17W1PM Human source 17W1SK Factors affecting of evaluation of the 17W1SL Ituman resources a 17W1ST Titan is a managetermine the quan 17ZAP 18MTY rasic course of mates paid to metals as 18PZP tension and compression and com | inancing), savings and investments (investment horizon, return, risk, investment strategy), insurance (insurance types, suitability and a (retirement savings and insurance). Personal Management es, work group, man as personality, planning, choice, evaluation and education of human sources, work adaptation, teamwork, interce Urban and Regional Rail Transport Systems transport demand, modal-split, distribution of passenger flows on public regional transport lines. Optimization of line management, lire timetable. Vehicle circulation creation. Optimizing driver shifts and arranging them in turnus. Effects of barrier-free and public transpormarketing. Sociology of Human Resources Sociology of Human Resources and their importance, work group as a special kind of social group, communication, personal management, modern management, human of the organization. Titan Simulation ement game simulating the business decisions. Lets 2-8 student groups to produce and compete in the market with the same productive and capacity of production, plan budgets for marketing, research and development. They become familiar with the consequences of financial corporate reports and they use this information for other business decisions. Fundamentals od law Materials Science and Engineering erials science and engineering explains mechanical properties of structural materials based on their bonding forces and microstructure the most important engineering materials, also other major classes of materials are presented, namely ceramics, polymers and com to degradation processes in materials, to defectoscopy and to main mechanical tests. Elasticity and Strength ession. Bending of beam. Shear stress in bending of beam. Design and analysis of cross section of beam. Design of riveted, bolted and Analysis of deflection curve of beams. Torsion of circular cross sections. Combined loading. Stability. Structural Analysis f forces in plane and space. Calculation of reactions of statically determinate systems. Determination of axial force | ing (rent, mortga adequacy), secur KZ cultural communi KZ ne networking. Crort preferences. T KZ can resources plan KZ ct. Students set at of their decision Z Z,ZK ne. However the networking. Attention Z,ZK network and welded joints Z,ZK network and simposites. Attention Z,ZK network and si | 4 cation. 4 cation. 4 reating and the role of 4 cation, and the role of 4 cation, and the role of 5 cation and 5 cation |

| 20UITS | Introduction to Intelligent Transport Systems | Z,ZK | 7 | | | |
|-----------------------|---|--------------------|----------------|--|--|--|
| Terminology and le | Terminology and legislative framework telematics systems and their architecture. Telematics systems in practice and their operation. Fundamentals of information and telecommunication | | | | | |
| systems for ITS. Pr | systems for ITS. Principles and technical support measurement of traffic data, localization and navigation. Practical work with traffic data. Real examples of possible applications of the | | | | | |
| | principles of ITS. | | | | | |
| 21ZALD | Basics of Air Transport | KZ | 2 | | | |
| History, definitions, | 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, opt | imization of speed and heights, minimum fuel. Limitations of operation, maintenance, service life of aircraft. Traffic management, grou | nd handling, secur | ity. Air crew. | | | |
| | Airlines and economics. Space technologies. | | | | | |

For updated information see http://bilakniha.cvut.cz/en/FF.html Generated: day 2025-07-17, time 02:52.