Study plan

Name of study plan: 17 86 90 00 DVES 2012 K úvodní studijní plán

Faculty/Institute/Others:

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch:

Program of study: Manufacturing and Economy in Mechanical Engineering

Type of study: Bachelor combined

Required credits: 90

Elective courses credits: 88 Sum of credits in the plan: 178

Note on the plan: SP12BVES-EKO-K # první pokus

Name of the block: Compulsory courses in the program

Minimal number of credits of the block: 81

The role of the block: P

Code of the group: 12BVK4P

Name of the group: 09 2012 BVES 4.sem kombi povinné

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 5 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
2381075	Enterprise Management and Economics	Z,ZK	5	2P+2C	4	Р
2383102	Personnel Management Jan Horejc	Z	2	2P+1C	*	Р
2342005	Quality Control Jan Podaný	KZ	2	1P+1C+1L	*	Р
K341014	Technology II. Pavel Novák	Z,ZK	5	8KP+8KC	*	Р

Characteristics of the courses of this group of Study Plan: Code=12BVK4P Name=09 2012 BVES 4.sem kombi povinné

2381075	Enterprise Management and Economics	Z,ZK	5
2383102	Personnel Management	Z	2
Personnel / human reso	urce management is concerned with the effective management of people at work. Subject examines what can or should be d	done to make ped	ple both more
productive and more sat	sfied with their working life. Its goal is to help develop more effective managers and staff specialists who work directly with the I	numan resources	of organizations.
2342005	Quality Control	KZ	2
Basic quality control teri	ns, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: sta	tistical process co	ontrol, statistical
1 ' '	ns, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: sta hods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control systen	•	ontrol, statistical

Code of the group: 12BV*5P

Name of the group: 12 2012 BVES 5.sem povinné

Requirement credits in the group: In this group you have to gain 11 credits

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

Credits in the group: 11 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
2131519	Machine Elements for Technology Martin Dub, Eliška Cézová, Zden k ešpíro, Martin Havlí ek, Ji í Houkal, Jan Kanaval, František Lopot, Ond ej Što ek, Roman Uhlí František Lopot František Lopot (Gar.)	Z,ZK	5	2P+3C	*	Р
2381068	Cost Accounting Theodor Beran, Ladislav Vaniš Theodor Beran Theodor Beran (Gar.)	Z,ZK	5	2P+2C	*	Р
2141204	Introduction to Electrical Engineering for Technology Jan Chyský, Lubomír Musálek, Martin Novák Lubomír Musálek Jan Chyský (Gar.)	Z,ZK	4	2P+0C+2L	*	Р
2383001	Fundamentals of Law Václav Pilik Václav Pilik (Gar.)	Z	2	1P+1C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12BV*5P Name=12 2012 BVES 5.sem povinné

2131519	Machine Elements for Technology	Z,ZK	5
2381068	Cost Accounting	Z,ZK	5

The subject presents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budgeting (expected cost), so the individual achievements (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Emphasis is laid on the relation of costs on the whole - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budgeting and accounting structure (individual cost items) into the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conventional and also modern approaches in costing. The subject Cost Accounting is connected directly with the subject Accounting and represents an introduction to the problems of cost allocation to separate products, which are compared with the market price and finding out as their profitability, so their acceptability or unacceptability manufacturing program.

2141204 Introduction to Electrical Engineering for Technology

7.7K

4

Elements of electrical circuits, analysis of electrical circuits as DC and AC. El. Power and Energy. Principle and typical parameters diodes, transistors, thyristors, operation amplifiers. Analogue and digital circuits. AC el. curcuits. Electrical power and energy. Calculation, measurement, power factor. Transformer. Induction machines. Synchronous machines. DC-machines

2383001 Fundamentals of Law

_

2 ne Czech Lega

Basic orientation in legal system is a necessary part of professional equipment of each expert with university degree. The aim of this course is to provide a view into the Czech Legal Order, particular sources of law and system of law (branch of law), using tutorials, lectures, specialised literature and significant legal regulations. It is necessary for students to know our legal institutions, that will be regularly in touch with, especially during their professional career and to learn how to work with the collection of laws. At the same time the course leads students to know some practical habits and processes while putting the law on, especially in domain of contracts and other important legal relationships and to make them ready to prepare professional presentations and to understand basic structures between law and engineering

Code of the group: 12BV*5P-EKO

Name of the group: 14 2012 BVES 5.sem zam EKO povinné

Requirement credits in the group: In this group you have to gain 18 credits

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

Credits in the group: 18 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
2381514	Project management	Z,ZK	4	2P+2C	*	Р
2381059	Industrial Marketing Št pánka Uli ná Št pánka Uli ná (Gar.)	Z,ZK	5	3P+1C	*	Р
2381504	Accounting Theodor Beran Theodor Beran (Gar.)	Z,ZK	4	2P+2C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12BV*5P-EKO Name=14 2012 BVES 5.sem zam EKO povinné

2381514	Project management	Z,ZK	4
2381059	Industrial Marketing	Z,ZK	5
2381504	Accounting	Z,ZK	4

The objective of the subject is to become acquainted with the significance of accounting for enterprise management, with the content and formal structure and realization of the stages and changes of the economic results during the accounting period; further with accounting as a system needful for tax declaration and not least as a resource to financial analysis. The stress is laid on understanding the dichotomy as the basis of the double entry accounting system, which distinguishes the terms assets (in the long term and short term) and liabilities (share-holders? equity, liabilities). Of great importance is the assessing of assets and their parts. Ac-counting relates to other information subsystems as budgeting, cost accounting, short term and long term planning. There are further some other subjects concerning enterprise management, connected with accounting, especially in the field of financial management. Accounting is one of the fundamental instrument of a business manager who understands the content and structure of the balance sheet, profit and loss account and the cash/flow statement. It is very possible that some of the students will exploit the knowledge of accounting in their future occupation as managers, financial directors, in consulting firms and auditing companies.

Code of the group: 12BV*6P

Name of the group: 15 2012 BVES 6.sem povinné

Requirement credits in the group: In this group you have to gain 9 credits

Requirement courses in the group: In this group you have to complete 2 courses

Credits in the group: 9 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
2331071	Automation of Production Processes Jaroslav ervený, Aleš Herman, Ladislav Kola ík, Viktor Kreibich, Ji í Kucha, Vít Novák, František Tatí ek Aleš Herman Aleš Herman (Gar.)	Z,ZK	5	3P+2C	*	Р
2381098	Enterprise Finance František Freiberg František Freiberg (Gar.)	Z,ZK	4	2P+2C	*	Р
2382048	Statistical and Decision Analysis Barbora Stieberová Barbora Stieberová (Gar.)	KZ	4	2P+1C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12BV*6P Name=15 2012 BVES 6.sem povinné

2331071 Automation of Production Processes

Automation of Production Processes

Automation of basic technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanization and automation in iron and steel foundries. Automation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Designing and programming of robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines.

2381098 Enterprise Finance Z,ZK 4

The subject Financing of the Enterprise provides a broad-based introduction to financial management. Students have an opportunity to acquire an understanding of the main con-cepts and their practical application in decision-making. Students gain knowledge of financial management role within a business, financial ratios, nature and purpose of projected financial statements and their role in the development of future plans for a business and in the assessing the impact of management decision on the performance and position of a business, factors which must be taken into account when managing the working capital of a business, various aspects of financing the business through external and internal sources of finance available to a business, ways how business can make decision and evaluation involv-ing investments in new technology, and various aspects of mergers and takeovers.

2382048 Statistical and Decision Analysis KZ 4

Statistical analysis is a good basis for a creation of decision-making models. The goal of this subject is to teach students to apply the selected statistical method, to apply models of decision analysis, to create models for the management of industrial enterprises.

Code of the group: 12BV*6P-EKO

Name of the group: 16 2012 BVES 6.sem zam EKO povinné

Requirement credits in the group: In this group you have to gain 21 credits

Requirement courses in the group: In this group you have to complete 5 courses

Credits in the group: 21 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
2383993	Bachelor Thesis Ladislav Vaniš, Barbora Stieberová, Jan Lhota František Freiberg František Freiberg (Gar.)	Z	5	0P+6C	*	Р
2381712	Managerial Counting Miroslav Žilka	Z,ZK	4	2P+2C	*	Р
2381174	Enterprise Information Systems Vladimír Brdek	Z,ZK	4	2P+2C	*	Р
2381107	Engineering Ergonomy Ladislav Vaniš Jan Horeic (Gar.)	Z,ZK	4	2P+2C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12BV*6P-EKO Name=16 2012 BVES 6.sem zam EKO povinné

2383993	Bachelor Thesis	Z	5
Work on specialized tas	sks related to the focus of a thesis.		
2381712	Managerial Counting	Z,ZK	4

The course is oriented to project management approach. During the course are solved cases that respond to practical situations. The cases are stressed on cost-returns calculations, on the solving interactions among costs, capacity of resources and the price. And also on the calculation typical kinds of variations and their explanation and the selection of the appropriate managerial decision. The students are concerning on the right way of operational budget creation and assessment. The link on the internal company accounting is shown and explain. The computerized models are used by explanation.

	, 1		
2381174	Enterprise Information Systems	Z,ZK	4
2381107	Engineering Ergonomy	Z,ZK	4

The aim of the subject engineering ergonomics is to become acquainted with the problems, constraints and the optimal solution of the fundamental unit of an enterprise or organization, i.e. with system - man - technology (machine) - environment. The character of the subject is going out from the anthropocentric principle, i. e. that every system MTE as in the manufacturing, managing, technological, designing so in other spheres it is important unambiguously to accommodate them to the possibilities, abilities and skills of the weakest link - that is to the given man. The students will learn not only to start from the man?s limitations during the designing of the MTE system, but also evaluate the existing economic level of the system and design rationalization measures for its optimization. The mission of the subject is that the students will be able in their work on all levels of economic spheres to ensure the optimal wellbeing for themselves and for the users of the designed systems as well as for their subordinates. The not-excludable output is also the health of man and higher quality and productivity of labour.

Code of the group: 12DVK1P-KMEN

Name of the group: 00 2012 D kmenové 1. semestr VES kombinované

Requirement credits in the group:

Requirement courses in the group:

Credits in the group: 0

Note on the group:

12B**1P-KMEN#

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
2182019	Chemistry Radek Šulc, Martin Dostál, Vojt ch B lohlav, Stanislav Solna, Jan Sko ilas Radek Šulc Radek Šulc (Gar.)	KZ	3	2P+1C	1	Р
2011021	Constructive Geometry Ivana Linkeová	Z,ZK	6	3P+2C	*	Р
2383008	Managerial Psychology	Z	2	1P+1C	*	Р
2011056	Mathematics I Radka Keslerová, Marta Hlavová, Ji í Holman, Gejza Dohnal, Marta ertíková, Vladimír Hric, Nikola Pajerová, Petr Louda, Lukáš Hájek, Radka Keslerová Gejza Dohnal (Gar.)	Z,ZK	8	4P+4C	*	Р
2372041	Computer Support for Study	KZ	3	1P+1C	*	Р
2132001	Engineering Design I. Karel Petr	KZ	2	1P+2C	1	Р
2131005	History of Technology	ZK	3	2P+0C	1	Р
K333038	Fundamentals of Technology I.	Z	3	8B	*	Р

2182019	Chemistry	KZ	3
General chemistry	y from the point of view of mechanical and process engineering. Physical chemistry forms 2/3 of the course (st	tructure and properties of matter, there	modynamics,
phase equilibrium,	n, chemical reactions, reaction engineering), the remaining 1/3 is devoted to organic chemistry (hydrocarbons,	polymers) and biochemistry. Laborato	ry practice is
oriented upon the I	material properties measurement.		
2011021	Constructive Geometry	Z,ZK	6
The subject is focu	sused on geometric objects in the space - curves, surfaces and solids and their properties and mutual relations	S.	'
2383008	Managerial Psychology	Z	2
2011056	Mathematics I	Z,ZK	8
In the course, grea	ater emphasis is placed on the theoretical basis of the concepts discussed and on the derivation of basic relat	tionships and connections between co	ncepts. Students
will also get to know	by the procedures for solving problems with parametric input. In addition, students will gain extended knowledge in	n some thematic areas: eigennumbers	and eigenvectors
•			.
oi a ilialiix, iayloi į	r polynomial, integral as a limit function, integration of some special functions.		
2372041	Computer Support for Study	KZ	3
2372041			_
2372041 The course introdu	Computer Support for Study	nical computations with the use of com	puters. Students
2372041 The course introdu	Computer Support for Study luces students into creating technical and professional documents on computers or Web and into realizing technical and professional documents on computers or Web and into realizing technical students.	nical computations with the use of com	puters. Students
2372041 The course introdu gain practical skills 2132001	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technical solutions or security in a text editor, by realizing technical computations with a spreadsheet calculator, and the security of t	nical computations with the use of com by creating technical-based WWW pag	puters. Students ge.
2372041 The course introdu gain practical skills 2132001	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technics by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and lengineering Design I.	nical computations with the use of com by creating technical-based WWW pag	puters. Students ge.
2372041 The course introdu gain practical skills 2132001 Basic of technical in 2131005	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technics by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and leading technical computations with a spreadsheet calculator.	nical computations with the use of comby creating technical-based WWW page KZ	puters. Students ge. 2
2372041 The course introdu gain practical skills 2132001 Basic of technical I 2131005 Developement of h	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technical so by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and I engineering Design I. representation, dimensioning and tolerancing History of Technology	nical computations with the use of comby creating technical-based WWW page KZ ZK vilization. Emphasis is given upon new	puters. Students ge. 2 3 branches of
2372041 The course introdu gain practical skills 2132001 Basic of technical I 2131005 Developement of h	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technical so by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and I engineering Design I. representation, dimensioning and tolerancing History of Technology History of Technology History of the domain of science and technology in the retrospective of the developement of our civilization.	nical computations with the use of comby creating technical-based WWW page KZ ZK vilization. Emphasis is given upon new	puters. Students ge. 2 3 branches of
2372041 The course introdu gain practical skills 2132001 Basic of technical I 2131005 Developement of h technology with sp K333038	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technical so by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and I engineering Design I. I representation, dimensioning and tolerancing History of Technology human knowledge in the domain of science and technology in the retrospective of the developement of our civipecial attention to the contribution of mining, iron metallurgy, power engineering, transportation and of the mace	nical computations with the use of comby creating technical-based WWW page KZ ZK vilization. Emphasis is given upon new chine industry in the narrower sense of Z	puters. Students ge. 2 3 branches of f the word. 3
2372041 The course introdu gain practical skills 2132001 Basic of technical I 2131005 Developement of h technology with sp K333038 Production process	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technical so by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and I Engineering Design I. I representation, dimensioning and tolerancing History of Technology human knowledge in the domain of science and technology in the retrospective of the developement of our civipecial attention to the contribution of mining, iron metallurgy, power engineering, transportation and of the mace Fundamentals of Technology I.	nical computations with the use of comby creating technical-based WWW pages KZ KZ ZK vilization. Emphasis is given upon new chine industry in the narrower sense of Z steel and cast iron, technical metals. Pr	puters. Student ge. 2 3 branches of f the word. 3 oduction of pig
2372041 The course introdu gain practical skills 2132001 Basic of technical I 2131005 Developement of h technology with sp K333038 Production process iron and steel. Cas	Computer Support for Study uces students into creating technical and professional documents on computers or Web and into realizing technical solutions by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and I Engineering Design I. I representation, dimensioning and tolerancing History of Technology human knowledge in the domain of science and technology in the retrospective of the developement of our civipecial attention to the contribution of mining, iron metallurgy, power engineering, transportation and of the mace Fundamentals of Technology I. sses in engineering production. Technology of engineering production. Materials in engineering. Concepts of states.	nical computations with the use of comby creating technical-based WWW pages KZ ZK vilization. Emphasis is given upon new chine industry in the narrower sense of Z steel and cast iron, technical metals. Prechnology. Forming technology. Hot an	puters. Students ge. 2 3 branches of f the word. 3 oduction of pig d cold forging.

Code of the group: 12DVK2P-KMEN

Name of the group: 00 2012 D kmenové 2. semestr VES kombinované

Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0

Note on the group:

12B**2P-KMEN#

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
2021041	Physics I.	Z,ZK	7	4P+1L	*	Р
2011062	Matematika II. Radka Keslerová	Z,ZK	8	4P+4C	*	Р
2322029	Materials Science I. Jakub Horník, Jana Sobotová, Ji í Cejp, Elena ižmárová, Pavlína Hájková, Stanislav Krum, Jan Kr il, Vladimír Mára, Lucie Pilsová, Jana Sobotová Jana Sobotová (Gar.)	KZ	3	2P+1L	2	Р

2012037	Computer Graphics Marta Hlavová, Ji i Holman, Nikola Pajerová, Martin Hanek, Jan Karel, Ivana Linkeová, Jaroslav Cibulka Ivana Linkeová	KZ	3	1P+1C	*	Р	
2131002	Engineering Design II Martin Dub, Martin Havlí ek, Jan Kanaval, Jan Flek, Karel Petr, Marek Štádler, Jan Hoidekr Karel Petr Karel Petr (Gar.)	Z,ZK	4	2P+3C	2	Р	

Characteristics of the courses of this group of Study Plan: Code=12DVK2P-KMEN Name=00 2012 D kmenové 2. semestr VES kombinované

2021041 | Physics I. | Z,ZK | 7

Kinematics and dynamics of a particle motion. Principle of conservation of energy. System of particles, centre of mass. Rigid body. Continuum, elastic properties of bodies. Oscillations, waves. Fluid mechanics. Temperature and heat transfer. Kinetic theory of gases. Thermodynamics. Electric field, current, conductivity, resistance. Conductors, semiconductors, insulators. Magnetic field. Magnetic materials. Laboratories - accuracy of measurements, systematic and random errors, uncertainty of direct and indirect measurements, regression, measurements of 11 various experiments related to the lectures.

2011062 Matematika II. Z,ZK

Open and closed set, boundary in E^k. Real function of k-variables. Partial derivatives and differentiability. Gradient and directional derivative. Differential operators div (divergence) and curl (rotation). Function given implicitly. Local and global (= absolute) extremes of a function of more variables. Double integral, volume (=triple) integral, Fubini theorem. Transformation of integrals to polar, cylindrical and spherical coordinates. A simple smooth curve and line integral of a scalar and vector function. Circulation and Green's theorem. A potential vector field, independence of a line integral on the path. Simple smooth surface and surface integral of a scalar function and a vector function. Flow of a vector field through a surface. The Gauss-Ostrogradskij theorem.

 2012037
 Computer Graphics
 KZ
 3

 2131002
 Engineering Design II
 Z,ZK
 4

Principles of ISO GPS (Geometrical Products Specification). Students will get critical knowledge about ISO system of limits and fits, tolerancing, surface texture, geometrical tolerance, dimensional loops, tolerancing of angles and cones, tolerancing of threads. Integral part of course is a project where students apply and practice their knowledge from lectures.

Code of the group: 12DVK3P-KMEN

Name of the group: 00 2012 D kmenové 3. semestr redukované pro VES kombinované

Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0

Note on the group:

12BV*3P-KMEN-R #

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
2021025	Physics II.	Z,ZK	4	1P+2L	3	Р
2011009	Mathematics III Radka Keslerová, Ji í Holman, Gejza Dohnal, Marta ertíková, Vladimír Hric, Jan Valášek, Lud k Beneš, Tomáš Bodnár, Tomáš Neustupa, Stanislav Kra mar Stanislav Kra mar (Gar.)	Z,ZK	5	2P+2C	*	Р
2311004	Mechanics for Technology	Z,ZK	7	4P+2C	*	Р
2321039	Materials Science II. Jakub Horník, Jana Sobotová, Ji í Cejp, Elena ižmárová, Jan Walter, Pavlína Hájková, Stanislav Krum, Jan Kr il, Vladimír Mára, Stanislav Krum Jana Sobotová (Gar.)	Z,ZK	4	2P+2L	*	Р
K331068	Technology I Bohumír Bedná	Z,ZK	5	16B	*	Р
2121023	Thermodynamics	Z,ZK	5	3P+2C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12DVK3P-KMEN Name=00 2012 D kmenové 3. semestr redukované pro VES kombinované

Z,ZK	4						
Faraday's law of electromagnetic induction. Maxwell's equations, electromagnetic waves. Light, wave optics, geometrical optics. Quantum properties of electromagnetic waves. Interaction							
of radiation with matter. Photoelectric effect. Wave-particle mature of matter. Quantum-mechanical description of particle's motion. Hydrogen atom and periodic system of elements.							
periments related	d to the lectures.						
Z,ZK	5						
Z,ZK	7						
Z,ZK	4						
d thermo-mechar	nical processing,						
Z,ZK	5						
orming processes	. Semi-products,						
heating-up. Cutting. Cold and hot forming. Welds. Weldability. Weldment testing. Thermal cutting. Brasing. Surface treatment.							
Z,ZK	5						
The course deal with a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic concepts and principles are							
	electromagnetic wind periodic system experiments related Z,ZK Z,ZK Z,ZK Z,ZK d thermo-mechan Z,ZK orming processes						

The course deal with a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic concepts and principles are introduced, and they are applied mostly to systems behaving as ideal gases or typical vapours. Basic notions associated with ideal mixtures are studied with an emphasis on psychometrics. Heat transfer covers fundamentals of conduction, convection and radiation. Heat exchangers are treated as an engineering application. Exercises and labs are devoted to practical problems and experimental technique.

Name of the block: Compulsory elective courses

Minimal number of credits of the block: 9

The role of the block: PV

Code of the group: 12BV*4Q-BZJ VES

Name of the group: 11 2012 bakalá ské zkoušky z jazyk pro VES

Requirement credits in the group: In this group you have to gain at least 2 credits (at most 10)

Requirement courses in the group: In this group you have to complete at least 1 course (at most 5)

Credits in the group: 2 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
2041061	English-Bachelor Exam Michele Le Blanc, Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Nina Procházková Ayyub	Z,ZK	2	0P+2C	*	PV
2041063	French - Bachelor Exam /FME Michaela Schusová, Dušana Jirovská Eliška Vítková Eliška Vítková (Gar.)	Z,ZK	2	0P+2C	*	PV
2041062	German - Bachelor Exam / FME Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Jaroslava Kommová	Z,ZK	2	0P+2C	*	PV
2041065	Russian - Bachelor Exam / FME Eliška Vítková, Michaela Schusová, Hana Volejníková, Dušana Jirovská Eliška Vítková	Z,ZK	2	0P+2C	*	PV
2041064	Spanish - Bachelor Exam / FME Eliška Vítková, Michaela Schusová, Jaime Andrés Villagómez Eliška Vítková	Z,ZK	2	0P+2C	*	PV

Characteristics of the courses of this group of Study Plan: Code=12BV*4Q-BZJ VES Name=11 2012 bakalá ské zkoušky z jazyk pro

2041061	English-Bachelor Exam	Z,ZK	2					
Mapped to the Common European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficulties, to take part in discussions,								
to write a summary, a re	eport and an essay, to read technical texts, to master grammar at advanced level.							
2041063	French - Bachelor Exam /FME	Z,ZK	2					
Mapped to the Commor	Mapped to the Common European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficulties, to take part in discussions,							
to write a summary, a re	eport and an essay, to read technical texts, to master grammar at advanced level.							
2041062	German - Bachelor Exam / FME	Z,ZK	2					
Mapped to the Commor	European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater diff	iculties, to take pa	rt in discussions,					
to write a summary, a re	eport and an essay, to read technical texts, to master grammar at advanced level.							
2041065	Russian - Bachelor Exam / FME	Z,ZK	2					
Mapped to the Commor	European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater diff	iculties, to take pa	rt in discussions,					
to write a summary, a re	eport and an essay, to read technical texts, to master grammar at advanced level.							
2041064	Spanish - Bachelor Exam / FME	Z,ZK	2					
Mapped to the Common European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficulties, to take part in discussions,								
to write a summary, a re	o write a summary, a report and an essay, to read technical texts, to master grammar at advanced level.							

Code of the group: 12BV*4Q-ZAM

Name of the group: 10 2012 BVES 4.sem zam 1povvol

Requirement credits in the group: In this group you have to gain at least 5 credits (at most 10)

Requirement courses in the group: In this group you have to complete at least 1 course (at most 2)

Credits in the group: 5

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
2321067	Technical Application of Materials Stanislav Krum	Z,ZK	5	3P+1C	*	PV
2381002	Fundamentals of Economics Theodor Beran Theodor Beran (Gar.)	Z,ZK	5	2P+2C	*	PV

Characteristics of the courses of this group of Study Plan: Code=12BV*4Q-ZAM Name=10 2012 BVES 4.sem zam 1povvol

2321067	Technical Application of Materials			Z,ZK	5
P edm t popisuje apliko	vatelnost jednotlivých skupin inženýrských materiál	a jejich odpovídající vlastnosti. Rovn ž	se v nuje aktuálním vývojovým tr	end mt chto ski	upin. The subject

describes applicability of specific engineering material types and their characteristics. It deals with the current development trends in these materials as well.

2381002 Fundamentals of Economics

Z.ZK

5

The course is focused on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating of the economics according to so called macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different markets and competitions.

Code of the group: 12BV*5Q-OP

Name of the group: 13 2012 BVES 5.sem 1povvol oborové projekty

Requirement credits in the group: In this group you have to gain at least 2 credits (at most 8)

Requirement courses in the group: In this group you have to complete at least 1 course (at most 4)

Credits in the group: 2 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
2322091	Project Jakub Horník, Jana Sobotová, Ji í Cejp, Elena ižmárová, Pavlína Hájková, Stanislav Krum, Jan Kr il, Vladimír Mára, Jakub Horváth, Stanislav Krum	KZ	2	0P+2C	*	PV
2382091	Specialization Project Ladislav Vaniš, Barbora Stieberová, Vladimír Brdek František Freiberg	KZ	2	0P+2C	*	PV
2332091	Project Jaroslav ervený, Aleš Herman, Ladislav Kola ík, Viktor Kreibich, Ji í Kucha, František Tatí ek, Bohumír Bedná, Barbora Bryksí Stunová, Jan ermák, Ladislav Kola ík Aleš Herman (Gar.)	KZ	2	0P+2C	*	PV
2342091	Project Vladislav Andronov, Libor Beránek, František Holešovský, Tomáš Kellner, Michal Koptiš, Ji í Kyncl, Martin Kyncl, Jan Mádl, Petr Mikeš, Pavel Novák	KZ	2	0P+2C	*	PV

Characteristics of the courses of this group of Study Plan: Code=12BV*5Q-OP Name=13 2012 BVES 5.sem 1povvol oborové projekty

2322091 | Project
On the basis of the preliminary submission of a bachelor thesis the students, under supervision of their supervisors, prepare a review summarizing and evaluating the studied literature with particular emphasis on experimental technologies which can be applied in their bachelor theses. They can also mention a planned experiment or evaluate hitherto obtained knowledge or results.

2382091	Specialization Project	KZ	2
2332091	Project	KZ	2
2342091	Project	KZ	2
Work on specialized ta	sks.		

Name of the block: Elective courses
Minimal number of credits of the block: 0

The role of the block: V

Code of the group: 12BV**V-ALFA

Name of the group: 02 2012 ALFA volitelné pro VES

Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0
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
202A041	Physics I.	ZK	3	0P+0L	*	V
201A021	Constructive Geometry A Ivana Linkeová	ZK	3	0P+0C	*	V
201A056	Mathematics I.A Radka Keslerová	ZK	4	0P+0C	*	V
201A062	Mathematics II.A Radka Keslerová	ZK	4	0P+0C	*	V

Characteristics of the courses of this group of Study Plan: Code=12BV**V-ALFA Name=02 2012 ALFA volitelné pro VES

202A041 Physics I.

Kinematics and dynamics of a particle motion. Principle of conservation of energy. System of particles, centre of mass. Rigid body. Continuum, elastic properties of bodies. Oscillations, waves. Fluid mechanics. Temperature and heat transfer. Kinetic theory of gases. Thermodynamics. Electric field, current, conductivity, resistance. Conductors, semiconductors.

waves. Fluid mechanics. Temperature and heat transfer. Kinetic theory of gases. Thermodynamics. Electric field, current, conductivity, resistance. Conductors, semiconductors, insulators. Magnetic field. Magnetic materials. Laboratories - accuracy of measurements, systematic and random errors, uncertainty of direct and indirect measurements, regression, measurements of 11 various experiments related to the lectures.

201A021	Constructive Geometry A	ZK	3			
The subject is focused						
201A056	Mathematics I.A	ZK	4			
Introduction to linear al	ntroduction to linear algebra, analytic geometry of straight lines and planes in E3, calculus of functions of one variable					
201A062	Mathematics II.A	ZK	4			

Open and closed set, boundary in E^k. Real function of k-variables. Partial derivatives and differentiability. Gradient and directional derivative. Differential operators div (divergence) and curl (rotation). Function given implicitly. Local and global (= absolute) extremes of a function of more variables. Double integral, volume (=triple) integral, Fubini theorem. Transformation of integrals to polar, cylindrical and spherical coordinates. A simple smooth curve and line integral of a scalar and vector function. Circulation and Green's theorem. A potential vector field, independence of a line integral on the path. Simple smooth surface and surface integral of a scalar function and a vector function. Flow of a vector field through a surface. The Gauss-Ostrogradskij theorem.

Code of the group: 12B**1V-DOP SEMI

Name of the group: 05 2012 doporu ené seminá e

Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0

Note on the group:

Pokud si chce student své dosud získané znalosti (například z matematiky, fyziky, cizích jazyků atd.) doplnit, může si zapsat některý z volitelných předmětů, které příslušné ústavy pro 1. semestr

(zimní) vypisují. Doporučujeme zejména předměty uvedené v této skupině

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
2026016	Physics - Seminar	Z	2	0P+2C	1	V
2016007	Mathematics I Seminar Radka Keslerová, Olga Majlingová Radka Keslerová	Z	2	0P+2C	1	V

Characteristics of the courses of this group of Study Plan: Code=12B**1V-DOP SEMI Name=05 2012 doporu ené seminá e

2026016	Physics - Seminar	Z	2
The subject is mainly m	eant for high-school students for repetition of high-school physics.		
2016007	Mathematics I Seminar	Z	2

Code of the group: 12B**1V-DOP ZJK

Name of the group: 06 2012 doporu ené základní jazykové kurzy a prezentace

Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0
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
2046155	English Conversation Michele Le Blanc, Eliška Vítková, Ilona Šimice, Nina Procházková Ayyub Nina Procházková Ayyub Michele Le Blanc (Gar.)	Z	2	0P+2C	*	V
2046156	English Conversation Michele Le Blanc, Eliška Vítková, Ilona Šimice, Nina Procházková Ayyub Nina Procházková Ayyub	Z	2	0P+2C	L	V
2046071	English - Lower Intermediate Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová	Z	2	0P+2C	L	V
2046070	English - Lower Intermediate Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Michaela Schusová Ilona Šimice (Gar.)	Z	2	0P+2C	Z	V
2046074	English - Advanced Michele Le Blanc, Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Michaela Schusová Ilona Šimice (Gar.)	Z	2	0P+2C	Z	V
2046075	English - Advanced Michele Le Blanc, Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Ilona Šimice	Z	2	0P+2C	L	V
2046072	English - Upper Intermediate Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Michaela Schusová Ilona Šimice (Gar.)	Z	2	0P+2C	Z	V
2046073	English - Upper Intermediate Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Ilona Šimice	Z	2	0P+2C	L	V

2046068	English - Beginners Eliška Vítková, Michaela Schusová, Ilona Šimice, Hana Volejníková, Veronika Kratochvílová Michaela Schusová Ilona Šimice (Gar.)	Z	2	0P+2C	Z	V
2046069	English - Beginners Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub, Hana Volejníková, Veronika Kratochvílová Ilona Šimice	Z	2	0P+2C	L	V
2046126	Czech Lower Intermediate Jaroslava Kommová	Z	2	0P+2C	L	V
2046125	Czech Lower Intermediate	Z	2	0P+2C	Z	V
2046118	Jaroslava Kommová Czech -Advanced Jaroslava Kommová	Z	2	0P+2C	L	V
2046117	Czech -Advanced Jaroslava Kommová	Z	2	0P+2C	Z	V
2046127	Czech - Upper Intermediate	Z	2	0P+2C	Z	V
2046128	Jaroslava Kommová Czech - Upper Intermediate	Z	2	0P+2C	L	V
2046119	Jaroslava Kommová Czech Language for Beginners I.	Z	2	0P+2C	Z	V
2046120	Jaroslava Kommová Czech Language for Beginners II.	Z	2	0P+2C	L	V
2046086	Jaroslava Kommová French - Lower Intermediate Course Michaela Schusová, Dušana Jirovská Michaela Schusová Michaela	Z	2	0P+2C	Z	V
2046087	Schusová (Gar.) French - Lower Intermediate Course	Z	2	0P+2C	L	V
2046091	Michaela Schusová, Dušana Jirovská Dušana Jirovská French - Advanced	Z	2	0P+2C	L	V
2046090	Michaela Schusová, Dušana Jirovská Dušana Jirovská French - Advanced Eliška Vítková, Michaela Schusová, Dušana Jirovská Eliška Vítková Eliška	Z	2	0P+2C	Z	V
2046089	Vítková (Gar.) French - Upper Intermediate Michaela Schusová, Dušana Jirovská Dušana Jirovská	Z	2	0P+2C	L	V
2046088	French - Upper Intermediate Eliška Vítková, Michaela Schusová, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046084	French - Beginners Michaela Schusová, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046085	French - Beginners' Course Michaela Schusová, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	L	V
2146060	Indonesian Language Course for Exchange	Z	2	0P+2C	*	V
2146061	Technical Indonesian - Course I.	Z	2	0P+2C	Z	V
2144062	Technical Indonesian - Course II.	Z,ZK	3	1P+2C	L	V
2046078	German - Lower Intermediate Course Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046079	German - Lower Intermediate Course Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Eliška Vítková	Z	2	0P+2C	L	V
2046083	German - Advanced Course Eliška Vitková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Jaroslava Kommová	Z	2	0P+2C	L	V
2046082	German - Advanced Course Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046081	German - Upper Intermediate Course Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Eliška Vítková	Z	2	0P+2C	L	V
2046080	German - Upper Intermediate Course Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046076	German - Beginners Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046077	German - Beginners Eliška Vítková, Michaela Schusová, Jaroslava Kommová, Petr Laurich Eliška Vítková	Z	2	0P+2C	L	V
2046161	Presentations in English Eliška Vítková, Michaela Schusová, Ilona Šimice, Nina Procházková Ayyub Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	*	V
2046166	Presentations in Czech Eliška Vítková, Jaroslava Kommová, Petr Laurich Jaroslava Kommová Petr Laurich (Gar.)	Z	2	0P+2C	*	V

2046162	Presentations in German Eliška Vítková, Jaroslava Kommová, Petr Laurich Jaroslava Kommová		2	0P+2C	*	V
	Eliška Vítková (Gar.)	_	_	00		,
2046164	Presentations in Russian Eliška Vítková, Dušana Jirovská Dušana Jirovská (Gar.)	Z	2	0P+2C	*	V
2046163	Presentations in French language Eliška Vítková, Dušana Jirovská Dušana Jirovská Dušana Jirovská (Gar.)	Z	2	0P+2C	*	V
2046165	Presentations in Spanish Eliška Vítková Eliška Vítková	Z	2	0P+2C	*	V
2046137	Russian - Lower Intermediate Course Eliška Vítková, Michaela Schusová, Hana Volejníková, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046138	Russian - Lower Intermediate Course Michaela Schusová, Hana Volejníková, Dušana Jirovská Dušana Jirovská	Z	2	0P+2C	L	V
2046141	Russian - Advanced Eliška Vítková, Michaela Schusová, Hana Volejníková, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046142	Russian - Advanced Michaela Schusová, Hana Volejníková, Dušana Jirovská Dušana Jirovská	Z	2	0P+2C	L	V
2046140	Russian - Upper Intermediate Michaela Schusová, Hana Volejníková, Dušana Jirovská Dušana Jirovská	Z	2	0P+2C	L	V
2046139	Russian - Upper Intermediate Eliška Vítková, Michaela Schusová, Hana Volejníková, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046136	Russian - Beginners Michaela Schusová, Hana Volejníková, Dušana Jirovská Dušana Jirovská	Z	2	0P+2C	L	V
2046135	Russian - Beginners Eliška Vítková, Michaela Schusová, Hana Volejníková, Dušana Jirovská Michaela Schusová Michaela Schusová (Gar.)	Z	2	0P+2C	Z	V
2046099	Spanish - Lower Intermediate Michaela Schusová, Jaime Andrés Villagómez Eliška Vítková	Z	2	0P+2C	L	V
2046098	Spanish - Lower Intermediate Eliška Vítková, Michaela Schusová, Jaime Andrés Villagómez Eliška Vítková Eliška Vítková (Gar.)	Z	2	0P+2C	Z	V
2046096	Spanish - Beginners Eliška Vítková, Michaela Schusová, Jaime Andrés Villagómez Eliška Vítková Eliška Vítková (Gar.)	Z	2	0P+2C	Z	V
2046097	Spanish - Beginners Michaela Schusová, Jaime Andrés Villagómez Jaime Andrés Villagómez	Z	2	0P+2C	L	V

Characteristics of the courses of this group of Study Plan: Code=12B**1V-DOP ZJK Name=06 2012 doporu ené základní jazykové kurzy a prezentace

2046155	English Conversation	Z	2
Improving communic	cative skills in speaking on general topics and general technical topics.		'
2046156	English Conversation	Z	2
Improving communic	cative skills in speaking on general topics and general technical topics.		'
2046071	English - Lower Intermediate	Z	2
Mapped to the Com	mon European Framework of Reference Level A2 Aim: Understanding clearly spoken language about everyday situations which	h a student meets	either at schoo
or at his/her free tim	ne and speaking about them. Writing in a simple way about familiar topics. reading and comprehension of simple texts. Improven	ment of professiona	al language.
2046070	English - Lower Intermediate	Z	2
Aim: Understanding	clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about the	em. Writing in a sir	nple way abou
familiar topics. Read	ling and comprehension of simple texts. Improvement of professional language. A1 - A2.		
2046074	English - Advanced	Z	2
The aim: compreher	nsion of spoken English as well as lectures given in English without great difficulties and active participation in a discussion. Wri	itten and oral skills	on advanced
evel. Ability to write	a summary, a report, an essay. reading and comprehension of popular-scientific and scientific articles or texts from student's fix	eld of studies withou	out difficulties.
Grammar structures	s on advanced level. B1 - B2.		
			_
2046075	English - Advanced	Z	2
	English - Advanced mon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in	_	_
Mapped to the Com		English without gre	eat difficulties
Mapped to the Com and active participat	mon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in	English without gre	eat difficulties
Mapped to the Com and active participat	mon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compre	English without gre	eat difficulties
Mapped to the Com and active participat scientific articles or 2046072	mon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level.	English without greehension of popula	eat difficulties r-scientific and
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend	mon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate	English without greehension of popula	eat difficulties r-scientific and
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend	mon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standar	English without greehension of popula	eat difficulties r-scientific and
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of ever 2046073	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standar yday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1.	English without greehension of popula Z rd English speech a	eat difficulties r-scientific and 2 and conversation 2
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of ever 2046073 Mapped to the Com	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standar yday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate	English without greehension of popular Z rd English speech a Z nglish and common	eat difficulties r-scientific and 2 and conversatio 2 n professional
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of ever 2046073 Mapped to the Com	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standaryday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate English - Upper Intermediate mon European Framework of Reference Level B1. The aim is to extend language skills taking into consideration professional English.	English without greehension of popular Z rd English speech a Z nglish and common	eat difficulties r-scientific and 2 and conversatio 2 n professional
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of ever 2046073 Mapped to the Com terminology. Compression and active processing the compression of the Compression and active processing the compression and active participation active participation and active participation active participation active participation and active participation active participat	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standaryday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate English - Upper Intermediate mon European Framework of Reference Level B1. The aim is to extend language skills taking into consideration professional English.	English without greehension of popular Z rd English speech a Z nglish and common	eat difficulties r-scientific and 2 and conversatio 2 n professional
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of ever 2046073 Mapped to the Com terminology. Compressions of the Compressions o	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standaryday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate Imon European Framework of Reference Level B1. The aim is to extend language skills taking into consideration professional English speech and conversation about topics of everyday life - at school, at work, during free time, on intermediate in the standard English speech and conversation about topics of everyday life - at school, at work, during free time, on intermediate	English without greehension of popular Z rd English speech a Z nglish and common mediate level. Broa	eat difficulties r-scientific and 2 and conversatio 2 n professional dening gramm
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of ever 2046073 Mapped to the Com terminology. Compressions of the Compressions o	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standaryday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate Imon European Framework of Reference Level B1. The aim is to extend language skills taking into consideration professional English and English speech and conversation about topics of everyday life - at school, at work, during free time, on intermediate English - Beginners	English without greehension of popular Z rd English speech a Z nglish and common mediate level. Broa	eat difficulties r-scientific and 2 and conversation 2 n professional dening gramm
Mapped to the Com and active participat scientific articles or 2046072 The aim is to extend about topics of every 2046073 Mapped to the Com terminology, Compressional Company Compression Services (Company Company C	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standar yday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate I language skills taking into consideration professional English - Upper Intermediate I language skills taking into consideration professional English - Upper Intermediate English - Beginners English - Beginners English - Beginners English - Beginners	English without greehension of popular Z rd English speech a Z nglish and common mediate level. Broad Z professional langua Z	eat difficulties r-scientific and 2 and conversation 2 n professional dening gramm 2 age). A1 2
Mapped to the Comand active participat scientific articles or 2046072 The aim is to extend about topics of every 2046073 Mapped to the Commonwell and the Common active scientific articles or 2046068 Aim: Basic vocabular 2046069 Mapped to the Common active scientific active scientific articles are scientific articles and active scientific articles are scientifi	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standaryday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate I language skills taking into consideration professional English - Upper Intermediate I language skills taking into consideration professional English - Upper Intermediate I language skills taking into consideration professional English - Beginners English - Beginners English - Beginners English - Beginners	English without greehension of popular Z rd English speech a Z nglish and common mediate level. Broad Z professional langua Z	eat difficulties r-scientific and 2 and conversation 2 n professional dening gramm 2 age). A1 2
Mapped to the Comand active participat scientific articles or 2046072 The aim is to extend about topics of every 2046073 Mapped to the Commonwell and the Common active scientific articles or 2046068 Aim: Basic vocabular 2046069 Mapped to the Common active scientific active scientific articles are scientific articles and active scientific articles are scientifi	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standar yday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate I language skills taking into consideration professional English - Upper Intermediate I language skills taking into consideration professional English - Upper Intermediate I language skills taking into consideration professional English - Beginner sature of standard English speech and conversation about topics of everyday life - at school, at work, during free time, on intermediate level. Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English - Beginners I language skills taking into consideration professional English and common professional English - Beginners I language skills taki	English without greehension of popular Z rd English speech a Z nglish and common mediate level. Broad Z professional langua Z	eat difficulties r-scientific and 2 and conversatio 2 n professional dening gramm 2 age). A1 2
Mapped to the Comand active participat scientific articles or 2046072 The aim is to extend about topics of every 2046073 Mapped to the Comberniology. Compression Service Se	Imon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in tion in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. reading and compretexts from student's field of studies without difficulties. Grammar structures on advanced level. English - Upper Intermediate I language skills taking into consideration professional English and common professional terminology. Comprehension of standar yday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 - B1. English - Upper Intermediate Imon European Framework of Reference Level B1. The aim is to extend language skills taking into consideration professional Englenation of standard English speech and conversation about topics of everyday life - at school, at work, during free time, on intermediate. English - Beginners ary of everyday life in a written and spoken form. Understanding and use of basic expressions of general scientific terminology (in English - Beginners mon European Framework of Reference Level A1 Aim: Basic vocabulary of everyday life in a written and spoken form. Understant terminology (professional language).	English without greehension of popular Z rd English speech a Z rd English and common mediate level. Broad Z rofessional languar Z rofessional languar Z rofessional use of barries Z	eat difficulties r-scientific and 2 and conversation 2 n professional dening gramm 2 age). A1 2 asic expression

2046125	Czech Lower Intermediate	Z	2
Aim: Understanding cle	, arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about the	m. Writing in a sir	nple way about
familiar topics. Reading	and comprehension of simple texts. Improvement of professional language.		
2046118	Czech -Advanced	Z	2
	Common European Framework of Reference: B1- B2 The aim: comprehension of spoken Czech as well as lectures given in C		Į.
	discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. Reading and comprehens	_	
	is from student's field of studies without difficulties. Grammar structures on advanced level.	sion of popular oc	ordino and
		7	
2046117	Czech -Advanced	Z	2
	ten language as well as lectures in Czech on topics familiar to the student. Communication with native speakers, participation in	· ·	ressing opinions.
	write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical ar		T
2046127	Czech - Upper Intermediate	Z	2
Understanding standard	d speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abili	ty to describe exp	eriences and
events, briefly explain o	ne's opinions and plans. Reading and understanding general and technical texts.		
2046128	Czech - Upper Intermediate	Z	2
	n European Framework of Reference Level A2-B1. The aim is to extend language skills taking into consideration professional	Czech and comr	
	nsion of standard Czech speech and conversation about topics of everyday life - at school, at work, during free time, on interi		
knowledge technical lar			adoming and
		7	
2046119	Czech Language for Beginners I.	Z	2
	eryday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (profess		T
2046120	Czech Language for Beginners II.	Z	2
Mapped to the Commor	n European Framework of Reference Level A1 Aim: Basic vocabulary of everyday life in a written and spoken form. Understan	ding and use of b	asic expressions
of general scientific terr	ninology (professional language).		
2046086	French - Lower Intermediate Course	Z	2
	what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Wri	_	1
,	mprehension of simple texts. Improvement of professional language.	ting in a cimple w	ay about laminar
2046087	French - Lower Intermediate Course	Z	2
	Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which		
his/her free time and sp	peaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement o	of professional lar	nguage.
2046091	French - Advanced	Z	2
Mapped to the level of 0	Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on top	pics familiar to the	e student.
	tive speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading ar	-	
	ular scientific and technical articles.	ra arraorotarraning	tome concerning
		7	2
2046090	French - Advanced	_	_
	ken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation		Expressing
opinions. Written skills.	Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and te	chnical articles.	
2046089	French - Upper Intermediate	Z	2
Mapped to the level of 0	Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students of	omes across at w	ork, at school,
during free time, and ta	lking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understa	nding general and	d technical texts.
2046088	French - Upper Intermediate	Z	2
	d speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abili	_	1
_		ty to describe exp	enences and
	ne's opinions and plans. Reading and understanding general and technical texts.		
2046084	French - Beginners	Z	2
Understanding clearly v	vhat is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Wri	iting in a simple w	ay about familiar
topics. Reading and cor	mprehension of simple texts. Improvement of professional language.		
2046085	French - Beginners' Course	Z	2
Mapped to the level of 0	Common European Framework of Reference: A1 Aim: Understanding clearly what is spoken about everyday situations which	a student meets	at school or in
	beaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of		
			,
2146060	Indonesian Language Course for Exchange	Z	2
Basic of Indonesian Lai	nguage for Student Exchange Program to Indonesia		,
2146061	Technical Indonesian - Course I.	Z	2
Second part of Indones	ian Language for Student Exchange Program to Indonesia		
2144062	Technical Indonesian - Course II.	Z,ZK	3
	nguage for Student Exchange Program to Indonesia	,	
2046078		7	2
	German - Lower Intermediate Course	_	I
_	arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about the	m. writing in a sir	mpie way about
familiar topics. Reading	and comprehension of simple texts. Improvement of professional language.		
2046079	German - Lower Intermediate Course	Z	2
Mapped to the level of 0	Common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations whic	h a student meets	s either at school
or in his/her free time a	nd speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improveme	nt of professional	language.
2046083	German - Advanced Course	Z	2
	ן German - Advanced Course Common European Framework of Reference: B1- B2 The aim: comprehension of spoken German as well as lectures given in	_	_
	in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. Reading and compre		-
		mension or popul	ai -soichillio and
	s from student's field of studies without difficulties. Grammar structures on advanced level.		_
2046082	German - Advanced Course	Z	2
Comprehension of społ	ven language as well as lectures in German on topics familiar to the student. Communication with native speakers, participati	on in discussions	. Expressing
opinions. Written skills.	Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and te	chnical articles.	
2046081	German - Upper Intermediate Course	Z	2
	Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students co		_
	lking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understa		1
2046080	German - Upper Intermediate Course	Z	2
_	d speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability	ty to describe exp	eriences and
events, briefly explain o	ne's opinions and plans. Reading and understanding general and technical texts.		

2046076 Basic vocabulary o	German - Beginners feveryday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (profe	Zessional language)	2
2046077	German - Beginners	Z	2
	German - Degimers Common European Framework of Reference A1 Basic vocabulary of everyday life in a written and spoken form. Understandin	_	
	rminology (professional language).	g and use of basic	expressions or
		7	
2046161	Presentations in English	Z	2
	to present in English on technical topics, with a possible co-operation with specialized departments.		
2046166	Presentations in Czech	Z	2
	to give presentations in English on technical topics, with a possible co-operation with specialized departments.		
2046162	Presentations in German	Z	2
	senting technical topics in German, possibly in cooperation with specialized departments.		,
2046164	Presentations in Russian	Z	2
Preparation for pres	senting technical topics in Russian, possibly in cooperation with specialized departments.		
2046163	Presentations in French language	Z	2
Preparation for pres	senting technical topics in French, possibly in cooperation with specialized departments.	,	
2046165	Presentations in Spanish	Z	2
reparation for pres	senting technical topics in Spanish, possibly in cooperation with specialized departments.	1	1
2046137	Russian - Lower Intermediate Course	7	2
	irly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. W	ı — Vriting in a simple v	. –
_	d comprehension of simple texts. Improvement of professional language.		•
2046138	Russian - Lower Intermediate Course	Z	2
	of Common European Framework of Reference: A2 Understanding clearly what is spoken about everyday situations which a s	. –	. –
	king about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of prof		
2046141	Russian - Advanced	Z	2
		_	_
		ation in disclissions	Expressing
•	spoken language as well as lectures in Russian on topics familiar to the student. Communication with native speakers, participa ills. Ability to write an essay or a report. Reading and understanding texts concerning current issues and popular scientific and		. Expressing
opinions. Written sk	ills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and	technical articles.	
opinions. Written sk 2046142	ills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced	technical articles.	2
ppinions. Written sk 2046142 Mapped to the leve	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on	technical articles. Z n topics familiar to t	2 he student.
opinions. Written sk 2046142 Mapped to the leve Communication wit	ills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced Russian - Advanced Russian - Rus	technical articles. Z n topics familiar to t	2 he student.
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and	iills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading appopular scientific and technical articles.	technical articles. Z n topics familiar to t and understanding	2 he student. texts concerni
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on a native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading popular scientific and technical articles. Russian - Upper Intermediate	technical articles. Z n topics familiar to t and understanding	2 he student. texts concerni
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on a native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading popular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student	technical articles. Z n topics familiar to t and understanding Z t meets at work, at	2 he student. texts concerni 2 school, during
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve free time, and talkir	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on a native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding and understanding and understanding are popular scientific and popul	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an	2 he student. texts concerni 2 school, during d technical tex
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading popular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and unders Russian - Upper Intermediate	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z	2 he student. texts concerni 2 school, during d technical tex 2
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkir 2046139 Understanding star	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading popular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student needs at work, at school, during free time, and talking about these topics. Ability to describe that a student needs at work, at school, during free time, and talking about these topics. Ability to describe that a student needs at work, at school, during free time, and talking about these topics. Ability to describe that a student needs at work, at school, during free time, and talking about these topics.	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z	2 he student. texts concerni 2 school, during d technical tex
opinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student needs at work, at school, during free time, and talking about these topics. Ability none's opinions and plans. Reading and understanding general and technical texts.	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z sillity to describe exp	2 he student. texts concerni 2 school, during d technical tex 2 periences and
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading popular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abain one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z billity to describe exp	2 he student. texts concerni 2 school, during d technical tex 2 periences and
ppinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student regarded speech about familiar matters that a student regarded speech about familiar matters that a student regarded speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abian one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understanding	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z billity to describe exp	2 he student. texts concerni 2 school, during d technical tex 2 periences and
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading popular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abain one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z billity to describe exp	2 he student. texts concerni 2 school, during d technical tex 2 periences and
ppinions. Written sk 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student regarded speech about familiar matters that a student regarded speech about familiar matters that a student regarded speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abian one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understanding	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z billity to describe exp	2 he student. texts concerni 2 school, during d technical tex 2 periences and
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to perform the standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to perform the second of t	technical articles. Z n topics familiar to the and understanding Z the meets at work, at tanding general an Z illity to describe expending and use of bathers.	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expressions
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary o	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners	technical articles. Z n topics familiar to the and understanding Z the meets at work, at tanding general an Z illity to describe expending and use of bathers.	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expressions
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099	itilis. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional language)	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z sility to describe exp Z ding and use of ba Z essional language) Z	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression:
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading a popular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability none's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional Spanish - Lower Intermediate	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z dility to describe exp Z ding and use of ba Z essional language) Z tudent meets at sol	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression: 2 nool or in his/h
ppinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve ree time and speal	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on Innative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abian one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a sking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professing about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional about them.	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z dility to describe exp Z ding and use of ba Z essional language) Z tudent meets at sol	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression: 2 nool or in his/h
pipinions. Written ski 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve ree time and speal 2046098	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abian one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners Russian - Beginners f everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional Lower Intermediate) Of Common European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a signal of Common European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken about everyday situations which a signal is a spoken abo	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z sility to describe exp Z ding and use of ba Z essional language) Z tudent meets at scl fessional language Z	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression 2 nool or in his/h
popinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve ree time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve ree time and speal 2046098 Understanding clea	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on a native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading appopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abian one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand teterminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a sking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professionals - Lower Intermediate	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z sility to describe exp Z ding and use of ba Z essional language) Z tudent meets at scl fessional language Z	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression 2 nool or in his/h
opinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve free time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve free time and speal 2046098 Understanding clea opics. Reading and	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a studenting about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners If everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional basic plans) Spanish - Lower Intermediate I of Common European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a sking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language.	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z sility to describe exp Z ding and use of ba Z essional language) Z tudent meets at sclessional language Z Vriting in a simple v	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression 2 nool or in his/h 2 vay about famil
opinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve free time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve free time and speal 2046098 Understanding clea opics. Reading and 2046096	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and undersone Russian - Upper Intermediate Independent of Spanian - Upper Intermediate Independent	technical articles. Z n topics familiar to t and understanding Z t meets at work, at tanding general an Z sility to describe exp Z ding and use of ba Z essional language) Z tudent meets at scl fessional language Z Vriting in a simple v	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expression 2 nool or in his/h 2 vay about famil
opinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve free time, and talkin 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary of 2046099 Mapped to the leve free time and speal 2046098 Understanding clea topics. Reading and 2046096 Aim: Understanding	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and underse Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and underse at work, at school, during free time, and talking about these topics. Ability one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professions and plans) I of Common European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. Spanish - Lower Intermediate I comprehension of simple texts. Improvement of professional language.	technical articles. Z n topics familiar to to the and understanding Z the meets at work, at the tanding general and the scribe expectable. Z ding and use of bath the scribe and the sc	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expressions 2 hool or in his/h 2 vay about famil
opinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve free time, and talkin 2046139 Understanding star events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary or 2046099 Mapped to the leve free time and speal 2046098 Understanding clea topics. Reading and 2046096 Aim: Understanding familiar topics. Rea	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Abian one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understant terminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professional language) Spanish - Lower Intermediate I of Common European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a string about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. Spanish - Lower Intermediate I of Comprehension of simple texts. Improvement of professional language. Spanish - Beginners clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing and comprehension of simple texts. Improvement of professional language.	technical articles. Z topics familiar to topics familiar topics f	2 he student. texts concerni 2 school, during d technical tex 2 periences and 2 sic expressions 2 hool or in his/h 2 vay about famil 2 nple way abou
opinions. Written ske 2046142 Mapped to the leve Communication wit currant issues and 2046140 Mapped to the leve free time, and talkin 2046139 Understanding stare events, briefly expla 2046136 Mapped to the leve of general scientific 2046135 Basic vocabulary or 2046099 Mapped to the leve free time and speal 2046098 Understanding clea topics. Reading and 2046096 Aim: Understanding familiar topics. Rea 2046097	Russian - Advanced I of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on hinative speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading apopular scientific and technical articles. Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and underse Russian - Upper Intermediate I of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student ag about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and underse at work, at school, during free time, and talking about these topics. Ability one's opinions and plans. Reading and understanding general and technical texts. Russian - Beginners I of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understand terminology (professional language) Russian - Beginners I everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (professions and plans) I of Common European Framework of Reference A2 Understanding clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. Spanish - Lower Intermediate I comprehension of simple texts. Improvement of professional language.	technical articles. Z topics familiar to topics familiar topics f	2 he student. texts concerni 2 school, during d technical text 2 periences and 2 sic expression 2 hool or in his/h 2 vay about famil 2 nple way about 2

List of courses of this pass:

Code	Name of the course	Completion	Credits	
2011009	Mathematics III	Z,ZK	5	
	An introductory course in ordinary differential equation and infinite series.	'		
2011021	Constructive Geometry	Z,ZK	6	
	The subject is focused on geometric objects in the space - curves, surfaces and solids and their properties and mutual relations.			
2011056	Mathematics I	Z,ZK	8	
In the course, great	n the course, greater emphasis is placed on the theoretical basis of the concepts discussed and on the derivation of basic relationships and connections between concepts. Studen			
will also was salting and	the precedures for onlying problems with personatric input. In addition, at idente will gain extended traculades in some thematic arrange	the second contract of		

In the course, greater emphasis is placed on the theoretical basis of the concepts discussed and on the derivation of basic relationships and connections between concepts. Students will also get to know the procedures for solving problems with parametric input. In addition, students will gain extended knowledge in some thematic areas: eigennumbers and eigenvectors of a matrix, Taylor polynomial, integral as a limit function, integration of some special functions.

2011062	Matematika II.	Z,ZK	8
•	set, boundary in E^k. Real function of k-variables. Partial derivatives and differentiability. Gradient and directional derivative. Different		
	Function given implicitly. Local and global (= absolute) extremes of a function of more variables. Double integral, volume (=triple) integral,		
	r, cylindrical and spherical coordinates. A simple smooth curve and line integral of a scalar and vector function. Circulation and Greer ce of a line integral on the path. Simple smooth surface and surface integral of a scalar function and a vector function. Flow of a vecto	-	
neia, maepenaen	Gauss-Ostrogradskij theorem.	r neid tillodgir a su	illace. The
2012037	Computer Graphics	KZ	3
2016007	Mathematics I Seminar	Z	2
201A021	Constructive Geometry A	ZK	3
	The subject is focused on geometric objects in the space - curves, surfaces and solids and their properties and mutual relation		
201A056	Mathematics I.A	ZK	4
	Introduction to linear algebra, analytic geometry of straight lines and planes in E3, calculus of functions of one variable	<u> </u>	
201A062	Mathematics II.A	ZK	4
•	set, boundary in E^k. Real function of k-variables. Partial derivatives and differentiability. Gradient and directional derivative. Differenti		
	Function given implicitly. Local and global (= absolute) extremes of a function of more variables. Double integral, volume (=triple) integral, r, cylindrical and spherical coordinates. A simple smooth curve and line integral of a scalar and vector function. Circulation and Greer		
	t, cylindrical and spriencal cooldinates. A simple smooth curve and line integral of a scalar and vector function, circulation and Green see of a line integral on the path. Simple smooth surface and surface integral of a scalar function and a vector function. Flow of a vector	· ·	
, , , , ,	Gauss-Ostrogradskij theorem.		
2021025	Physics II.	Z,ZK	4
•	ectromagnetic induction. Maxwell's equations, electromagnetic waves. Light, wave optics, geometrical optics. Quantum properties of elec	•	
	natter. Photoelectric effect. Wave-particle mature of matter. Quantum-mechanical description of particle's motion. Hydrogen atom and	•	
	ser. Band theory of solids, semiconductors. Nucleus, radioactivity, sources of nuclear energy. Laboratories - measurements of 6 exper		
2021041	Physics I.	Z,ZK	7
	namics of a particle motion. Principle of conservation of energy. System of particles, centre of mass. Rigid body. Continuum, elastic pro echanics. Temperature and heat transfer. Kinetic theory of gases. Thermodynamics. Electric field, current, conductivity, resistance. Co	•	
	ic field. Magnetic materials. Laboratories - accuracy of measurements, systematic and random errors, uncertainty of direct and indire		
_	measurements of 11 various experiments related to the lectures.		-
2026016	Physics - Seminar	Z	2
	The subject is mainly meant for high-school students for repetition of high-school physics.	<u> </u>	
202A041	Physics I.	ZK	3
	namics of a particle motion. Principle of conservation of energy. System of particles, centre of mass. Rigid body. Continuum, elastic pro		
	echanics. Temperature and heat transfer. Kinetic theory of gases. Thermodynamics. Electric field, current, conductivity, resistance. Co ic field. Magnetic materials. Laboratories - accuracy of measurements, systematic and random errors, uncertainty of direct and indire		
il isulators. Magnet	measurements of 11 various experiments related to the lectures.	Ji measurements, i	regression,
2041061	English-Bachelor Exam	Z,ZK	2
	nmon European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficult		
	to write a summary, a report and an essay, to read technical texts, to master grammar at advanced level.		
2041062	German - Bachelor Exam / FME	Z,ZK	2
Mapped to the Con	nmon European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficult	ies, to take part in d	discussions,
0044000	to write a summary, a report and an essay, to read technical texts, to master grammar at advanced level.	7 71/	
2041063	French - Bachelor Exam /FME mon European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficult	Z,ZK	2 discussions
Mapped to the Con	to write a summary, a report and an essay, to read technical texts, to master grammar at advanced level.	ies, to take part in o	ilocuosiorio,
2041064	Spanish - Bachelor Exam / FME	Z,ZK	2
	nmon European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficult		
	to write a summary, a report and an essay, to read technical texts, to master grammar at advanced level.		
2041065	Russian - Bachelor Exam / FME	Z,ZK	2
Mapped to the Con	nmon European Framework Level B2. The aim is to understand spoken language and lectures on technical topics without greater difficult	ies, to take part in d	discussions,
00.40000	to write a summary, a report and an essay, to read technical texts, to master grammar at advanced level.		
2046068	English - Beginners	Z	2
2046069	abulary of everyday life in a written and spoken form. Understanding and use of basic expressions of general scientific terminology (p	7	2 ge). A1
	English - Beginners nmon European Framework of Reference Level A1 Aim: Basic vocabulary of everyday life in a written and spoken form. Understanding	∠ and use of basic ∈	
mapped to the col	of general scientific terminology (professional language).	, and doo of baolo c	жртоооюно
2046070	English - Lower Intermediate	Z	2
	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.	I I	
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language. A1 - A2.		
2046071	English - Lower Intermediate	Z	2
	mmon European Framework of Reference Level A2 Aim: Understanding clearly spoken language about everyday situations which a s		
	time and speaking about them. Writing in a simple way about familiar topics, reading and comprehension of simple texts. Improveme	·	
2046072	English - Upper Intermediate	Z	2
THE AITH IS 10 EXTEN	d language skills taking into consideration professional English and common professional terminology. Comprehension of standard En about topics of everyday life - at school, at work, during free time, on intermediate level. Broadening grammar knowledge. A2 -		onversation
2046073	English - Upper Intermediate	Z	2
	pmmon European Framework of Reference Level B1. The aim is to extend language skills taking into consideration professional Engli		
	rehension of standard English speech and conversation about topics of everyday life - at school, at work, during free time, on intermedia	-	
	knowledge.		
2046074	English - Advanced	Z	2
	nension of spoken English as well as lectures given in English without great difficulties and active participation in a discussion. Written		
ievei. Ability to wr	ite a summary, a report, an essay. reading and comprehension of popular-scientific and scientific articles or texts from student's field Grammar structures on advanced level. B1 - B2.	or studies without o	DITTICUITIES.
	Granina structures on auvanceu ievel. D1 - D2.		ı

2046075	English - Advanced	Z	2
	ommon European Framework of Reference Level B1 - B2. The aim: comprehension of spoken English as well as lectures given in Eng	-	
and active particip	pation in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay reading and comprehen	sion of popular-sc	ientific and
00.10070	scientific articles or texts from student's field of studies without difficulties. Grammar structures on advanced level.	- 1	
2046076	German - Beginners	Z	2
	abulary of everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (pr		
2046077	German - Beginners el Common European Framework of Reference A1 Basic vocabulary of everyday life in a written and spoken form. Understanding and	Z	2
wapped to the lev	general scientific terminology (professional language).	dise of basic expi	163310113 01
2046078	German - Lower Intermediate Course	Z	2
	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.		
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.		
2046079	German - Lower Intermediate Course	Z	2
	of Common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations which a s		
	e time and speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improvemen		
2046080	German - Upper Intermediate Course	Z	2
Understanding st	andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability t events, briefly explain one's opinions and plans. Reading and understanding general and technical texts.	to describe experie	ences and
2046081	German - Upper Intermediate Course	Z	2
	rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students com-	ı	
	nd talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding		
2046082	German - Advanced Course	Z	2
Comprehension	of spoken language as well as lectures in German on topics familiar to the student. Communication with native speakers, participation	n in discussions. E	xpressing
opinions.	Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a	nd technical article	es.
2046083	German - Advanced Course	Z	2
• •	el of Common European Framework of Reference: B1- B2 The aim: comprehension of spoken German as well as lectures given in Ge	•	
and active participa	ation in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. Reading and compreher	ision of popular-so	cientific and
2046094	scientific articles or texts from student's field of studies without difficulties. Grammar structures on advanced level.	7	2
2046084	French - Beginners arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing	- 1	
onderstanding elec	topics. Reading and comprehension of simple texts. Improvement of professional language.	in a simple way as	Journamman
2046085	French - Beginners' Course	Z	2
	rel of Common European Framework of Reference: A1 Aim: Understanding clearly what is spoken about everyday situations which a s	student meets at s	
his/her free tim	ne and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement		
	is and speaking about them, withing in a simple way about lamilial topics, reading and completionally of simple texts. Improvement	of professional lan	iguage.
2046086	French - Lower Intermediate Course	of professional lan	iguage.
2046086	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing	Z	2
2046086 Understanding clea	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language.	Z in a simple way ab	2 pout familiar
2046086 Understanding clea 2046087	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course	Z in a simple way ab	2 pout familiar
2046086 Understanding clea 2046087 Mapped to the lev	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a second course.	Z in a simple way at Z student meets at s	2 cout familiar 2 chool or in
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement	Z in a simple way ab Z student meets at s of professional lan	2 chool or in aguage.
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the speaking about them.	Z in a simple way at Z student meets at s of professional lan Z	2 chool or in aguage.
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement	Z in a simple way at Z student meets at s of professional lan Z	2 chool or in aguage.
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the sepaking about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability the service of the sepaking about these topics. Ability the service of the	Z in a simple way at Z student meets at s of professional lan Z	2 chool or in aguage.
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a since and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work,	2 chool or in inguage. 2 ences and 2 at school,
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a since and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students common talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work,	2 chool or in iguage. 2 ences and 2 at school, hnical texts.
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar 2046090	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ig general and tecl	2 chool or in inguage. 2 ences and 2 at school, inical texts. 2
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar 2046090 Comprehension	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ag general and tecl Z in discussions. Ex	2 chool or in inguage. 2 ences and 2 at school, inical texts. 2 cpressing
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar 2046090 Comprehension opinions.	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ag general and tecl Z in discussions. Ex nd technical article	2 chool or in inguage. 2 ences and 2 at school, innical texts. 2 expressing es.
2046086 Understanding cleat 2046087 Mapped to the levelophis/her free time 2046088 Understanding standard to the levelophis free time, are 2046090 Comprehension opinions. No. 2046091	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ag general and tecl Z in discussions. Ex nd technical article Z	2 chool or in inguage. 2 ences and 2 at school, innical texts. 2 expressing es. 2
2046086 Understanding cleat 2046087 Mapped to the levelophis/her free time 2046088 Understanding standard to the levelophis free time, are 2046090 Comprehension opinions. Napped to the levelophis free time, are 2046091 Mapped to the levelophis free time, are 2046091 Mapped to the levelophis free time, are 2046091	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ag general and tecl Z in discussions. Ex nd technical article Z oics familiar to the	2 chool or in inguage. 2 ences and 2 at school, innical texts. 2 expressing es. 2 student.
2046086 Understanding cleat 2046087 Mapped to the levelophis/her free time 2046088 Understanding standard to the levelophis free time, are 2046090 Comprehension opinions. Napped to the levelophis free time, are 2046091 Mapped to the levelophis free time, are 2046091 Mapped to the levelophis free time, are 2046091	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sepaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topics.	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ag general and tecl Z in discussions. Ex nd technical article Z oics familiar to the	2 chool or in inguage. 2 ences and 2 at school, innical texts. 2 expressing es. 2 student.
2046086 Understanding cleat 2046087 Mapped to the levelophis/her free time 2046088 Understanding standard to the levelophis free time, are 2046090 Comprehension opinions. Napped to the levelophis free time, are 2046091 Mapped to the levelophis free time, are 2046091 Mapped to the levelophis free time, are 2046091	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the professional language. French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability the events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding french - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced	Z in a simple way at Z student meets at s of professional lan Z to describe experie Z es across at work, ag general and tecl Z in discussions. Ex nd technical article Z oics familiar to the	2 chool or in inguage. 2 ences and 2 at school, innical texts. 2 expressing es. 2 student.
2046086 Understanding cleat 2046087 Mapped to the levelophis/her free time 2046088 Understanding st 2046089 Mapped to the levelophis/her time, are 2046090 Comprehension opinions. Section 2046091 Mapped to the levelophis communication with section 2046096	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a stee and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the standard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Were the student was a school or in his/her free time and speaking about them. Were the student was a school or in his/her free time and speaking about them. Were the student was a school or in his/her free time and speaking about them. Were the student was a school or in his/her free time and speaking about them. Were the student was a school or in his/her free time and speaking about them. Were the school or in his/her free time and speaking about them. Were the school or in h	Z in a simple way at Z student meets at s of professional land Z to describe experience Z es across at work, ag general and technical article Z in discussions. Ex and technical article Z oics familiar to the inderstanding texts	2 chool or in iguage. 2 ences and 2 at school, hnical texts. 2 expressing ies. 2 student. concerning
2046086 Understanding cleat 2046087 Mapped to the level his/her free time 2046088 Understanding st. 2046089 Mapped to the level during free time, are 2046090 Comprehension opinions. Section 2046091 Mapped to the level communication with 2046096 Aim:Understanding	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course French - Upper Intermediate Course French - Upper Intermediate and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the professional language and speaking about them. Writing in a simple way about familiar topics. Reading and understanding general and technical texts. French - Upper Intermediate French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Vermit amiliar topics. Reading and comprehension of simple texts. Improvement of professional language.	in a simple way at a simple wa	2 chool or in iguage. 2 ences and 2 at school, hnical texts. 2 expressing es. 2 student. concerning 2 way about
2046086 Understanding cleat 2046087 Mapped to the level his/her free time 2046088 Understanding st. 2046089 Mapped to the level during free time, are 2046090 Comprehension opinions. Value of the level	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course French - Lower Intermediate Course French - Lower Intermediate Course French - Upper Intermediate Course French - Upper Intermediate and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of the and speaking about them. Writing in a simple way about familiar topics. Reading and understanding stendard speech about familiar about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding french - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific	in a simple way at a simple way at a simple way at a student meets at sof professional land a simple way at a	2 chool or in iguage. 2 ences and 2 at school, hnical texts. 2 expressing es. 2 student. concerning 2 way about 2
2046086 Understanding cleat 2046087 Mapped to the level his/her free time 2046088 Understanding st. 2046089 Mapped to the level during free time, are 2046090 Comprehension opinions. In 2046091 Mapped to the level communication with 2046096 Aim:Understandin 2046097 Mapped to the Compression opinions. In 2046097	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a size and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference:A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding texts. French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. In familiar topics. Reading and comprehension of simple texts. Improvement of professional lang	Z in a simple way at Z student meets at s of professional lan Z to describe experience Z es across at work, ag general and tech Z in discussions. Ex nd technical article Z victs familiar to the nderstanding texts Z Vriting in a simple Z tudent meets at so	2 chool or in inguage. 2 at school, hnical texts. 2 structure a st
2046086 Understanding cleat 2046087 Mapped to the level his/her free time 2046088 Understanding st. 2046089 Mapped to the level during free time, are 2046090 Comprehension opinions. Value of the level	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course and Seaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and seaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and seaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and seaking about them. Writing in a simple way about familiar topics, Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding standard speech about familiar topics, that a students come at alking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding fexts concerning currant issues and popular scientific and understanding texts concerning currant issues and popular scientific and understanding texts concerning currant issues and popular scientific and technical articles. French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations whic	in a simple way at a simple way at a simple way at a structure at sof professional language at a simple at a simple way at a simple at a s	2 chool or in iguage. 2 at school, hnical texts. 2 structure in iguage. 2 at school, hnical texts. 2 structure in iguage. 2 student. concerning 2 way about 2 chool or in iguage.
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar 2046090 Comprehension opinions. Value of the level of the	French - Lower Intermediate Course arry what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course French - Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and speaking about them. Writing in a simple way about familiar topics, Reading and understanding general and technical texts. French - Upper Intermediate French - Advanced French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced French - Advanced French - Advanced French - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. Spanish - Beginners ommon European Framework of Reference Level A1. Aim: U	in a simple way at a simple way at a simple way at a structure at sof professional language at a simple at a simple way at a simple at a s	2 chool or in iguage. 2 ences and 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar 2046090 Comprehension opinions. Value of the level of the	French - Lower Intermediate Course arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course and Seaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and seaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and seaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language and seaking about them. Writing in a simple way about familiar topics, Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come and talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding standard speech about familiar topics, that a students come at alking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding fexts concerning currant issues and popular scientific and understanding texts concerning currant issues and popular scientific and understanding texts concerning currant issues and popular scientific and technical articles. French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations whic	in a simple way at a simple way at a simple way at a structure at sof professional language at a simple at a simple way at a simple at a s	2 chool or in iguage. 2 ences and 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st 2046089 Mapped to the lev during free time, ar 2046090 Comprehension opinions. Value of the level of the	French - Lower Intermediate Course arry what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding french - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic france in the student meets at school or in his/her free time and speaking about them. Vertically the subsets are also popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Vertically what is spoken about everyday situations which as topic firm themselved to the subsets. Improvement of professional language. Spanish -	in a simple way at a simple way at a simple way at a structure at sof professional language at a simple at a simple way at a simple at a s	2 chool or in iguage. 2 ences and 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2
2046086 Understanding cleat 2046087 Mapped to the lev his/her free tim 2046088 Understanding st. 2046089 Mapped to the lev during free time, ar 2046090 Comprehension opinions.\(^1\) 2046091 Mapped to the level of	French - Lower Intermediate Course arry what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course rel of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability to events, briefly explain one so opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate rel of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding French - Advanced of spoken language as well as lectures in French on topics familiar to the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on top the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement	in a simple way at a simple way at a simple way at a student meets at sof professional lan a simple way at a s	2 chool or in iguage. 2 at school, hnical texts. 2 cpressing es. 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2 chool or in iguage. 2 cout familiar 2
2046086 Understanding cleat 2046087 Mapped to the leven his/her free time are 2046089 Mapped to the leven during free time, are 2046090 Comprehension opinions. Valor 2046091 Mapped to the leven during free time are time are time are time are 2046097 Mapped to the Communication with a 2046097 Mapped to the Communication described by the Com	French - Lower Intermediate Course arrly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course el of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sea and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement. French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate el of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come dia talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding devents of the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. Spanish - Lower Intermediate arry what is spoken about	in a simple way at a student meets at sof professional land a sample experies a samp	2 chool or in iguage. 2 at school, hnical texts. 2 cpressing es. 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2 chool or in inguage. 2 cout familiar 2 or in his/her ige.
2046086 Understanding cleat 2046087 Mapped to the level his/her free time a 2046089 Mapped to the level during free time, ar 2046090 Comprehension opinions. Value of the level of the leve	French - Lower Intermediate Course arry what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course el of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a see and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. French - Upper Intermediate French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate el of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding standard speech about familiar topics, that a students come at talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding texts concerning currant issues and popular scientific and texts. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and texts. Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on top the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and comprehension	in a simple way at a simple way at a simple way at a student meets at sof professional lan a simple way at a s	2 chool or in iguage. 2 at school, hnical texts. 2 cpressing es. 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2 cout familiar 2 or in his/her ige. 2
2046086 Understanding cleat 2046087 Mapped to the leven his/her free time a 2046089 Mapped to the leven during free time, ar 2046090 Comprehension opinions. Valor opinions. V	French - Lower Intermediate Course arrly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing topics. Reading and comprehension of simple texts. Improvement of professional language. French - Lower Intermediate Course el of Common European Framework of Reference: A2 Aim: Understanding clearly what is spoken about everyday situations which a sea and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement. French - Upper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability events, briefly explain one's opinions and plans. Reading and understanding general and technical texts. French - Upper Intermediate el of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar topics, that a students come dia talking about these topics. Ability to describe experiences and events, explain one's opinions and plans. Reading and understanding devents of the student. Communication with native speakers, participation written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a French - Advanced level of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in French on topic the native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific and technical articles. Spanish - Beginners g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language. Spanish - Lower Intermediate arry what is spoken about	in a simple way at a student meets at sof professional land a sacross at work, aggeneral and technical article a simple way at a simple way at a simple way at a simple way at a serior since at school of rofessional languare a sussions. Expressions. Expressions.	2 chool or in iguage. 2 at school, hnical texts. 2 cpressing es. 2 student. concerning 2 way about 2 chool or in iguage. 2 chool or in iguage. 2 cout familiar 2 or in his/her ige. 2

2046118	Czech -Advanced	Z	2
Mapped to the leve	l of Common European Framework of Reference: B1- B2 The aim: comprehension of spoken Czech as well as lectures given in Czec	h without great diffi	iculties and
active participati	on in a discussion. Written and oral skills on advanced level. Ability to write a summary, a report, an essay. Reading and comprehensi	on of popular-scier	ntific and
	scientific articles or texts from student's field of studies without difficulties. Grammar structures on advanced level.		
2046119	Czech Language for Beginners I.	Z	2
	abulary of everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (pr	ofessional languag	
2046120	Czech Language for Beginners II.	Z	2
Mapped to the Con	nmon European Framework of Reference Level A1 Aim: Basic vocabulary of everyday life in a written and spoken form. Understanding	and use of basic e	expressions
	of general scientific terminology (professional language).		
2046125	Czech Lower Intermediate	<u> </u>	2
Aim: Understandin	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.	writing in a simple	way about
2040420	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.	7	
2046126	Czech Lower Intermediate g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them."	Z	2
Airi. Oriderstaridir	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.	writing in a simple	way about
2046127	Czech - Upper Intermediate	7	2
	andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability	to describe evperie	
onderstanding st	events, briefly explain one's opinions and plans. Reading and understanding general and technical texts.	to describe experie	ilocs and
2046128	Czech - Upper Intermediate	7	2
	nmon European Framework of Reference Level A2-B1. The aim is to extend language skills taking into consideration professional Cz	_	
	prehension of standard Czech speech and conversation about topics of everyday life - at school, at work, during free time, on interm		
	knowledge technical language.		
2046135	Russian - Beginners	Z	2
Basic voca	abulary of everyday life in a spoken and written form. Understanding and use of basic expressions of general scientific terminology (pi	ofessional languag	je)
2046136	Russian - Beginners	Z	2
Mapped to the leve	el of Common European Framework of Reference: A1 Basic vocabulary of everyday life in a spoken and written form. Understanding	and use of basic ex	rpressions
	of general scientific terminology (professional language)		
2046137	Russian - Lower Intermediate Course	Z	2
Understanding clea	arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing	in a simple way ab	out familiar
00.10.100	topics. Reading and comprehension of simple texts. Improvement of professional language.		
2046138	Russian - Lower Intermediate Course	Z _	2
	l of Common European Framework of Reference: A2 Understanding clearly what is spoken about everyday situations which a studen nd speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of p		
2046139	Russian - Upper Intermediate	7	2
	Audstian - Opper Intermediate andard speech about familiar matters that a student meets at work, at school, during free time, and talking about these topics. Ability	∠ to describe experie	_
oridorotarianing of	events, briefly explain one's opinions and plans. Reading and understanding general and technical texts.	to docoribo exporte	niooo ana
2046140	Russian - Upper Intermediate	Z	2
	rel of Common European Framework of Reference: A2 - B1 Understanding standard speech about familiar matters that a student med	_	
free time, and talki	ng about these topics. Ability to describe experiences and events, briefly explain one's opinions and plans. Reading and understanding	g general and tech	nical texts.
2046141	Russian - Advanced	Z	2
	of spoken language as well as lectures in Russian on topics familiar to the student. Communication with native speakers, participation		
opinions.	Written skills. Ability to write an essay or a report. Reading and understanding texts concerning currant issues and popular scientific a		
2046142	Russian - Advanced	Z	2
	evel of Common European Framework of reference: B1 - B2 Comprehension of spoken language as well as lectures in Russian on to		
Communication wit	h native speakers, participation in discussions. Expressing opinions. Written skills. Ability to write an essay or a report. Reading and uncurrant issues and popular scientific and technical articles.	nderstanding texts	concerning
2046455		7	2
2046155	English Conversation Improving communicative skills in speaking on general topics and general technical topics.	Z	2
2046156	English Conversation	Z	2
2040130	Improving communicative skills in speaking on general topics and general technical topics.	_	2
2046161	Presentations in English	Z	2
2010101	Preparing students to present in English on technical topics, with a possible co-operation with specialized departments.	_	-
2046162	Presentations in German	Z	2
2010102	Preparation for presenting technical topics in German, possibly in cooperation with specialized departments.	- 1	-
2046163	Presentations in French language	Z	2
	Preparation for presenting technical topics in French, possibly in cooperation with specialized departments.		_
2046164	Presentations in Russian	Z	2
		_	
2046165	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments.	۱ ک	-
2040103		Z	2
2040103	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments.	Z	
2046166	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish	·	
2046166	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments.	Z Z	2
2046166	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments. Presentations in Czech Preparing students to give presentations in English on technical topics, with a possible co-operation with specialized departments. Thermodynamics	Z Z ents.	2 2 5
2046166 2121023 The course deal wi	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments. Presentations in Czech Preparing students to give presentations in English on technical topics, with a possible co-operation with specialized departments. Thermodynamics th a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic	Z ents. Z,ZK ic concepts and pri	2 2 5 inciples are
2046166 2121023 The course deal wiintroduced, and the	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments. Presentations in Czech Preparing students to give presentations in English on technical topics, with a possible co-operation with specialized departments. Thermodynamics th a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic applied mostly to systems behaving as ideal gases or typical vapours. Basic notions associated with ideal mixtures are studied with a	Z ents. Z,ZK ic concepts and pring emphasis on psychological concepts.	2 2 5 inciples are chometrics.
2046166 2121023 The course deal wiintroduced, and the	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments. Presentations in Czech Preparing students to give presentations in English on technical topics, with a possible co-operation with specialized departments. Thermodynamics th a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic applied mostly to systems behaving as ideal gases or typical vapours. Basic notions associated with ideal mixtures are studied with a ers fundamentals of conduction, convection and radiation. Heat exchangers are treated as an engineering application. Exercises and	Z ents. Z,ZK ic concepts and pring emphasis on psychological concepts.	2 2 5 inciples are chometrics.
2046166 2121023 The course deal wi introduced, and the Heat transfer cov	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments. Presentations in Czech Preparing students to give presentations in English on technical topics, with a possible co-operation with specialized departments. Thermodynamics th a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic are applied mostly to systems behaving as ideal gases or typical vapours. Basic notions associated with ideal mixtures are studied with a ers fundamentals of conduction, convection and radiation. Heat exchangers are treated as an engineering application. Exercises and problems and experimental technique.	Z ents. Z,ZK ic concepts and prin emphasis on psylabs are devoted to	2 5 inciples are chometrics.
2046166 2121023 The course deal wi introduced, and the Heat transfer cov	Preparation for presenting technical topics in Russian, possibly in cooperation with specialized departments. Presentations in Spanish Preparation for presenting technical topics in Spanish, possibly in cooperation with specialized departments. Presentations in Czech Preparing students to give presentations in English on technical topics, with a possible co-operation with specialized departments. Thermodynamics th a basic engineering approach to classical thermodynamics, heat transfer and compressible flow through nozzles and diffusers. Basic applied mostly to systems behaving as ideal gases or typical vapours. Basic notions associated with ideal mixtures are studied with a ers fundamentals of conduction, convection and radiation. Heat exchangers are treated as an engineering application. Exercises and	Z ents. Z,ZK ic concepts and prin emphasis on psylabs are devoted to	2 2 5 inciples are chometrics. practical 4

2131005	History of Technology	ZK	3
'	human knowledge in the domain of science and technology in the retrospective of the developement of our civilization. Emphasis is	• .	
<u>. </u>	special attention to the contribution of mining, iron metallurgy, power engineering, transportation and of the machine industry in the r		the word.
2131519	Machine Elements for Technology	Z,ZK	5
2132001	Engineering Design I.	KZ	2
	Basic of technical representation, dimensioning and tolerancing		_
2141204	Introduction to Electrical Engineering for Technology	Z,ZK	4
	ical circuits, analysis of electrical circuits as DC and AC. El. Power and Energy. Principle and typical parameters diodes, transistors, tl		-
Analogue and	digital circuits. AC el. curcuits. Electrical power and energy. Calculation, measurement, power factor. Transformer. Induction machines	s. Synchronous ma	achines.
	DC-machines		
2144062	Technical Indonesian - Course II.	Z,ZK	3
0.1.10000	Basic of Indonesian Language for Student Exchange Program to Indonesia	_	
2146060	Indonesian Language Course for Exchange	Z	2
04.40004	Basic of Indonesian Language for Student Exchange Program to Indonesia	7	
2146061	Technical Indonesian - Course I.	Z	2
0400040	Second part of Indonesian Language for Student Exchange Program to Indonesia	1/7	
2182019	Chemistry y from the point of view of mechanical and process engineering. Physical chemistry forms 2/3 of the course (structure and properties	KZ	3
	y norm the point of view of mechanical and process engineering. Physical chemistry forms 2/3 of the course (structure and properties n, chemical reactions, reaction engineering), the remaining 1/3 is devoted to organic chemistry (hydrocarbons, polymers) and biocher		•
priase equilibrium	oriented upon the material properties measurement.	moti y. Laboratory	practice is
2311004	Mechanics for Technology	Z,ZK	7
2321039	Materials Science II.	Z,ZK	4
	netallurgy, iron-carbon alloys and influence of other elements, phase transformations, thermal, combined chemical and thermal and the	,	1 -
T undamentals of m	technical iron-carbon alloys, non-ferrous metals and their alloys, plastics, structural ceramics, composites, selection of materi		i processing,
2321067	Technical Application of Materials	Z,ZK	5
	iplikovatelnost jednotlivých skupin inženýrských materiál a jejich odpovídající vlastnosti. Rovn ž se v nuje aktuálním vývojovým treno	,	_
	bes applicability of specific engineering material types and their characteristics. It deals with the current development trends in these	-	
2322029	Materials Science I.	KZ	3
	ent state of materials engineering, overview of technical materials, internal structure of metals, crystal lattices and their defects, defor		_
fracture of mate	erials, structure and properties of materials and their testing, fundamentals of thermodynamics, phases and phase transformations, ir	on-carbon phase	diagram.
2322091	Project	KZ	2
On the basis of the	preliminary submission of a bachelor thesis the students, under supervision of their supervisors, prepare a review summarizing and e	valuating the stud	ied literature
with particular e	mphasis on experimental technologies which can be applied in their bachelor theses. They can also mention a planned experiment o	r evaluate hitherto	obtained
	knowledge or results.		
	-		
2331071	Automation of Production Processes	Z,ZK	5
Automation of basic	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat	ion and automatio	n in iron and
Automation of basic	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De	ion and automatio	n in iron and
Automation of basic steel foundries. A	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines.	ion and automatio	n in iron and ramming of
Automation of basic steel foundries. At 2332091	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project	ion and automatio esigning and progr	n in iron and ramming of
Automation of basic steel foundries. Au 2332091 2342005	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control	ion and automatio esigning and progr KZ KZ	n in iron and ramming of
Automation of basic steel foundries. Au 2332091 2342005 Basic quality control	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Described robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical	ion and automatio esigning and progr KZ KZ ical process control	n in iron and ramming of
Automation of basic steel foundries. Automation of basic steel foundries. Automatical 2332091 2342005 Basic quality control sam	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical repling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control.	ion and automation and progressigning and progress KZ KZ ical process control systems.	n in iron and ramming of 2 2 2 2 2 ol, statistical
Automation of basic steel foundries. Au 2332091 2342005 Basic quality control	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical inclined. Project Project	ion and automatio esigning and progr KZ KZ ical process control	n in iron and ramming of
Automation of basic steel foundries. Au 2332091 2342005 Basic quality contro san 2342091	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Project Work on specialized tasks.	KZ KZ KZ ical process control systems.	n in iron and ramming of 2 2 2 ol, statistical
Automation of basic steel foundries. Au 2332091 2342005 Basic quality control san 2342091	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Project Work on specialized tasks. Computer Support for Study	KZ KZ ical process control systems. KZ	n in iron and ramming of 2 2 2 ol, statistical 2
Automation of basic steel foundries. At 2332091 2342005 Basic quality control san 2342091 2372041 The course introduction	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Project Work on specialized tasks.	KZ KZ ical process control systems. KZ KZ	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students
Automation of basic steel foundries. At 2332091 2342005 Basic quality control san 2342091 2372041 The course introduction	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Description of robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with the statistical requirement of the project o	KZ KZ ical process control systems. KZ KZ he use of compute ical-based WWW	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students
Automation of basic steel foundries. At 2332091 2342005 Basic quality control san 2342091 2372041 The course introduction gain practice 2381002	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Designing and programming of robotic welding centers. Designing cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with tall skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical	KZ KZ ical process control systems. KZ KZ AZ ical process control systems. KZ AZ	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practice 2381002 The course is foculouse is foculouse is foculouse.	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Described robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with the all skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical Fundamentals of Economics	KZ KZ ical process control systems. KZ KZ AZ ical process control systems. KZ LEA	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practice 2381002 The course is foculouse is foculouse is foculouse.	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Described robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality concepts work on specialized tasks. Computer Support for Study Coes students into creating technical and professional documents on computers or Web and into realizing technical computations with tall skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical sed on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating	KZ KZ ical process control systems. KZ KZ AZ ical process control systems. KZ LEA	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practicate 2381002 The course is focut to so called.	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Described robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a statistical production of the p	KZ KZ ical process control systems. KZ KZ AZ ical process control systems. KZ kZ be use of compute ical-based WWW in the economic icets and competition Z,ZK	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons.
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practical 2381002 The course is focut to so called 2381059 2381068	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Described robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with the all skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical sed on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating dispersional control of production. Different markets of the production of the original control of production. Different markets of the production of the original control of production. Different markets of the production of the original control of t	KZ KZ ical process control systems. KZ KZ he use of compute ical-based WWW process and competition and competi	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 5
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practica 2381002 The course is focut to so called 2381059 2381068 The subject pres	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Described robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with the all skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical macroekonomics subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating demacroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting	KZ KZ ical process control systems. KZ he use of compute ical-based WWW process and competition and competitio	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practical 2381002 The course is focus to so called 2381059 2381068 The subject presindividual achievem	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Designing and programming of robotic welding centers. Design of automated finishing lines. Project Quality Control Of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical poling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical macroekonomics seed on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budgething and introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budgething contents.	KZ KZ ical process control systems. KZ he use of compute ical-based WWW process and competition in the compute ical-based www. In the compute ical-based with the c	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel steel steel steel steel foundries. Automatic steel	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control ol terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist ripling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality computers of project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a stills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical macroekonomics basic economic relations and consequences. Economics sed on the following subjects: basic economic rheories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Finde - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget as) into the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conventional and also mode	KZ KZ ical process control systems. KZ KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel steel steel steel steel foundries. Automatic steel	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Description of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality complying. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality computers are students into creating technical and professional documents on computers or Web and into realizing technical computations with a skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical on the following subjects: basic economic relations and consequences. Economics sed on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating demonstrated macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge ents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Enole - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget costs in the costing structure (direct and overhea	KZ KZ ical process control systems. KZ KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. A	c technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Description of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical poling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality complying. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality composed to specialized tasks. Computer Support for Study Cost students into creating technical and professional documents on computers or Web and into realizing technical computations with a spreadsheet calculator, and by creating technical skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical mentals of Economics Fundamentals of Economics seed on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating demacroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Enters of individual achievements and the understanding of the transformation from costs in the budget intermediate products, products, services), and fixed and variable costs. There are taught conventional and also mode inting is connected directly with the sub	KZ KZ ical process control systems. KZ KZ he use of compute ical-based WWW iz,ZK g of the economic test and competition in gand accounting and accounting and accounting rn approaches in a products, which are	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practica 2381002 The course is focus to so called 2381059 2381068 The subject presidividual achievem of costs on the will (individual cost iter subject Cost Accountries and Santon Sa	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist apling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist apling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a spreadsheet calculator, and by creating technical as kills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical macroekonomic circle, various economic relations and consequences. Economics sed on the following subjects: basic economic relations and consequences. Economics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge ents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Enterprise costs - to the costs of indi	KZ KZ ical process control systems. KZ he use of compute ical-based WWW process and competition and competition and accounting and accounting and accounting rn approaches in a products, which are significant as a competition and accounting accounting and accounting a	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries and 2342091 2372041 The course introduct gain practica 2381002 The course is focus to so called 2381059 2381068 The subject presidividual achievem of costs on the will (individual cost iter subject Cost Accoundable) 2381075 2381098	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a spreadsheet calculator, and by creating technical methods: by realizing technical computations with a spreadsheet calculator, and by creating technical macroekonomic circle, various economic relations and consequences. Economic aggregates and their consequences. Operating demacroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Enote - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget must be connected directly with the subject Accounting and represents an introduction to the problems of cost allocation to separate with the market price and finding out as their profitability, so their acceptability or unacceptability manufacturing program. Enterprise Management and Economics Enterprise Finance	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. icats and competition Z,ZK Z,ZK eting (expected compute ical-bases is laid or ing and accounting and accounting and accounting and accounting products, which are Z,ZK Z,ZK Z,ZK	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared
Automation of basic steel foundries. Automation of basic steel foundries. Automatics. Automatics and 2342091 2342091 2372041 The course introduct gain practical 2381002 The course is focut to so called 2381059 2381068 The subject presidividual achievem of costs on the will (individual cost iter subject Cost Accoundable) 2381075 2381098 The subject Finance	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality composed to the project work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical macroekonomics is a students into creating technical consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). In the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conventional and also mode unting is connected directly with the subject Accounting and represents an introduction to the problems of cost allocation to separate with the market price and finding out as their profitability, so their acceptability or unacceptability manufacturing program. Enterprise Management and Economics Enterprise Pinance ing of the Enterprise provides a broad-based introduction to financial management. Students have an opportunity to acquire an undersing of the contents have an opportunit	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. icats and competition Z,ZK Z,ZK eting (expected compute icats is laid or ing and accounting accounting and accounting accounting and accounting and accounting accounting a counting a counting accounting a counting	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 ain con-cepts
Automation of basic steel foundries. Automation of basic steel foundries. Automatics. Automatics and automatics are automatics. Automatics and automatics are automatics. Automatics are Automatics. Automatics are automatics. Auto	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with tall skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical computations and consequences. Economics aggregates and their consequences. Operating a macroekonomic circle, various economic relations and consequences. Economic aggregates and their consequences. Operating a macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budgents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). In onle - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). In the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conven	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. icats and competition in a products, which are purpose of project	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 iin con-cepts teed finan-cial
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. A	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Design and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control of the cycle. Standards 9 000 and 14 000, certification of quality control of the cycle. Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a spreadsheet calculator, and by creating technical satisfies by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical and the interpretable of the consequences. Departing the macroekonomic circle, various economic teletions and consequences. Economics Fundamentals of Economics Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budget may into the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conven	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical-based ical-ba	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 iin con-cepts teed finan-cial a busi-ness,
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic statements and the factors which must	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statistical pling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with tall skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical computations and consequences. Economics aggregates and their consequences. Operating a macroekonomic circle, various economic relations and consequences. Economic aggregates and their consequences. Operating a macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budgents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). In onle - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). In the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conven	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical-based ical-ba	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 ain con-cepts ted finan-cial a busi-ness, es of finance
Automation of basic steel foundries. Automation of basic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic steel foundries. Automatic statements and the factors which must	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control In terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist repling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study East students into creating technical and professional documents on computers or Web and into realizing technical computations with a skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical methods are students into creating subjects: basic economic relations and consequences. Economics Seed on the following subjects: basic economic relations and consequences. Economic aggregates and their consequences. Operating an acroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge ents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Cost intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). The enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget intermediate products, products, services) - by means of preliminary costing (expected	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical-based ical-ba	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 ain con-cepts ted finan-cial a busi-ness, es of finance
Automation of basic steel foundries. Automation of basic steel foundries. Automatics and 2342091 2342091 2372041 The course introduct gain practical 2381002 The course is focus to so called 2381059 2381068 The subject presidividual achievem of costs on the will (individual cost iter subject Cost Accoundable) 2381075 2381098 The subject Finance and their practical astatements and the factors which must available to 2381107	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist ripling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality centre. Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical macroekonomic circle, various economic relations and consequences. Economic aggregates and their consequences. Operating disconomic circle, various economic relations and consequences. Economic aggregates and their consequences. Operating disconomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Indice - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget may into the costing structure (direct and overhead costs), and fixed and variable costs. There are taught conventional an	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. icats and competition Z,ZK Z,ZK eting (expected compute icats and competition in a products, which are purpose of project ican position of a and internal source mergers and taked Z,ZK	n in iron and ramming of 2 2 2 ol, statistical 2 3 ers. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 in con-cepts teed finan-cial a busi-ness, es of finance overs. 4
Automation of basic steel foundries. Automation of basic steel foundries. Automatics and 2342091 2342091 2372041 The course introduct gain practical 2381002 The course is focus to so called 2381059 2381068 The subject presidividual achiever of costs on the will (individual cost iter subject Cost Accoundable Cost Accoundab	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizal utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control It terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist repling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control Of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist repling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality control. Project Work on specialized tasks. Computer Support for Study Designed statistical methods: Statistical terms and distributions. Statistical methods: Statistical m	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. icats and competition Z,ZK Z,ZK eting (expected compute icats and competition z,ZK z,ZK eting (expected compute icats and competition in a products, which are improducts, which are ican position of a condition of a condition in a process and internal source ican different source ican different source ican internal source ican ican ican ican ican ican ican ican	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 st), so the n the relation g structure costing. The re compared 5 4 din con-cepts led finan-cial a busi-ness, es of finance overs. 4 organization,
Automation of basis steel foundries. Automation of basis steel foundries. Automatics and 2342091 2342091 2342091 2372041 The course introduct gain practical 2381002 The course is focus to so called 2381059 2381068 The subject pressindividual achievem of costs on the will (individual cost iter subject Cost Accound 2381075 2381075 2381098 The subject Finance and their practical a statements and their factors which must available to 2381107 The aim of the subject. with system manufacturing, ma	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control ol terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist ingling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality compiling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality compiling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality compiling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality compiling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality compiling. Tools and methods for a quality assurance during professional documents on computers or Web and into realizing technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical computations with a spreadsheet calculator, and by creating technical macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark industrial Marketing Cost Accounting Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual cos	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical-based ical-ba	n in iron and ramming of 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Automation of basis steel foundries. Automation of basis steel foundries. Automatics and 2342091 2342091 2342091 2372041 The course introduct gain practical 2381002 The course is focus to so called 2381059 2381068 The subject pressindividual achievem of costs on the will (individual cost iter subject Cost Accound 2381075 2381075 2381098 The subject Finance and their practical a statements and the factors which must available to 2381107 The aim of the subject with system manufacturing, mathat is to the given	technological processes - casting, welding, forming and finishing. Facilities and equipment required to automate offices. Mechanizat utomation and robotics of die casting process, including other peripherals. Designing and programming of robotic welding centers. De robotic workstations for sheet metal forming. Design of automated forging cells. Design of automated finishing lines. Project Quality Control of terms, where is quality created, who is responsible for a quality. Basic statistical terms and distributions. Statistical methods: statist appling. Tools and methods for a quality assurance during product lifetime cycle. Standards 9 000 and 14 000, certification of quality or Project Work on specialized tasks. Computer Support for Study ces students into creating technical and professional documents on computers or Web and into realizing technical computations with a skills by creating an essay in a text editor, by realizing technical computations with a spreadsheet calculator, and by creating technical macroekonomic circle, various economic theories. Consumption behaviour in microeconomics. Theory of production. Different mark Industrial Marketing Cost Accounting ents an introduction to the problems of value management as the enterprise on the whole and its parts - centres - by means of budge tents (intermediate products, products, services) - by means of preliminary costing (expected costs) and actual costing (actual costs). Inole - enterprise costs - to the costs of individual achievements and the understanding of the transformation from costs in the budget may be interpreted in the cost of individual achievements and the understanding of the transformation from costs in the budget may be interpreted directly with the subject Accounting and represents an introduction to the problems of cost allocation to separate with the market price and finding out as their profitability, so their acceptability or unacceptability manufacturing program. Enterprise Management and Economics Enterprise Finance i	KZ KZ ical process control systems. KZ he use of compute ical-based WWW ical-based WWW ical-based www. ical-based ical-ba	n in iron and ramming of 2 2 2 ol, statistical 2 3 ars. Students page. 5 s according ons. 5 styles of finance costing. The re compared 5 4 din con-cepts ted finan-cial a busi-ness, es of finance overs. 4 organization, as in the weakest link omic level of

2381174	Enterprise Information Systems	Z,ZK	4
2381504	Accounting	Z,ZK	4
he objective of the	subject is to become acquainted with the significance of accounting for enterprise management, with the content and formal structure	e and realization of	of the stage
nd changes of the	economic results during the accounting period; further with accounting as a system needful for tax declaration and not least as a resc	urce to financial a	analysis. Th
ress is laid on un	derstanding the dichotomy as the basis of the double entry accounting system, which distinguishes the terms assets (in the long term	and short term) a	and liabilitie
share-holders? e	juity, liabilities). Of great importance is the assessing of assets and their parts. Ac-counting relates to other information subsystems a	s budgeting, cost	accounting
nort term and long	term planning. There are further some other subjects concerning enterprise manage-ment, connected with accounting, especially in the	field of financial m	nanagemen
Accounting is one	of the fundamental instrument of a business manager who understands the content and structure of the balance sheet, profit and los	ss account and the	e cash/flow
statement. It is v	ery possible that some of the students will exploit the knowledge of accounting in their future occupation as managers, financial direc	tors, in consulting	firms and
	auditing companies.		
2381514	Project management	Z,ZK	4
2381712	Managerial Counting	Z,ZK	4
ne course is orier	ted to project management approach. During the course are solved cases that respond to practical situations. The cases are stresse	d on cost-returns	calculation
on the solving ir	teractions among costs, capacity of resources and the price. And also on the calculation typical kinds of variations and their explanat	ion and the select	tion of the
propriate manag	erial decision. The students are concerning on the right way of operational budget creation and assessment. The link on the internal of	company account	ing is shov
	and explain. The computerized models are used by explanation.		
2382048	Statistical and Decision Analysis	KZ	4
Statistical analysi	is a good basis for a creation of decision-making models. The goal of this subject is to teach students to apply the selected statistical	I method, to apply	y models o
	decision analysis, to create models for the management of industrial enterprises.		
2382091	Specialization Project	KZ	2
2383001	Fundamentals of Law	Z	2
asic orientation in	legal system is a necessary part of professional equipment of each expert with university degree. The aim of this course is to provid	e a view into the 0	Żzech Lega
rder, particular s	ources of law and system of law (branch of law), using tutorials, lectures, specialised literature and significant legal regulations. It is no	ecessary for stude	ents to kno
our legal institutio	ns, that will be regularly in touch with, especially during their professional career and to learn how to work with the collection of laws.	At the same time	the course
ads students to k	now some practical habits and processes while putting the law on, especially in domain of contracts and other important legal relation	ships and to make	them read
	to prepare professional presentations and to understand basic structures between law and engineering		
2383008	Managerial Psychology	Z	2
2383102	Personnel Management	Z	2
Personnel / huma	n resource management is concerned with the effective management of people at work. Subject examines what can or should be do	ne to make people	both more
oductive and mo	e satisfied with their working life. Its goal is to help develop more effective managers and staff specialists who work directly with the hum	an resources of o	rganization
2383993	Bachelor Thesis	Z	5
	Work on specialized tasks related to the focus of a thesis.		'
K331068	Technology I	Z,ZK	5
oundry properties	of metals. Treatment. Pouring. Casting solidification. Moulding and core making. Thermal treatment. Plastic deformation. Division of form	ing processes. Se	mi-product
	heating-up. Cutting. Cold and hot forming. Welds. Weldability. Weldment testing. Thermal cutting. Brasing. Surface treatmen		
K333038	Fundamentals of Technology I.	Z	3
	ses in engineering production. Technology of engineering production. Materials in engineering. Concepts of steel and cast iron, techn	ical metals. Produ	1
-	sting: modeling devices, molding materials, molding and castings. Foundry alloys. Overview of basic casting technology. Forming tech		
	rging. Rolling. Production of pipes. Bulk and sheet metal forming. Welding technology. The characteristics of the various types of weld		
•		-	-
	welding and arc welding with coated electrodes. Thermal cutting.		

Technology II.

Z,ZK

5

For updated information see http://bilakniha.cvut.cz/en/FF.html Generated: day 2024-05-17, time 05:40.

K341014