Study plan

Name of study plan: Management a ekonomika ve stavebnictví

Faculty/Institute/Others: Department: Branch of study guaranteed by the department: Welcome page Garantor of the study branch: Program of study: Management and Economics in Civil Engineering Type of study: Bachelor full-time Required credits: 240 Elective courses credits: 0 Sum of credits in the plan: 240 Note on the plan: platí pro nástup v akademickém roce 2021

Name of the block: Compulsory courses Minimal number of credits of the block: 117 The role of the block: Z

Code of the group: BE20210100 Name of the group: Management a ekonomika ve stavebnictví, 1. semestr Requirement credits in the group: In this group you have to gain at least 29 credits Requirement courses in the group: In this group you have to complete at least 6 courses Credits in the group: 29

Note on the group:

Note on the grou	P.					
Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
101KG01	Constructive Geometry Iva K ivková, Iva Malechová, Michal Zdražil, Iva Slámová, Hana Lakomá, Petra Vacková, Jana ápová, Jozef Bobok Jana ápová Iva K ivková (Gar.)	Z,ZK	5	2P+2C	Z,L	Z
126DOMT	Development, property valuation and real estate market Jakub Kvasnica, Barbora Romová, Kate ina Eklová, Renáta Schneiderová Heralová, Eduard Hromada, Pavlína Píchová Eduard Hromada Renáta Schneiderová Heralová (Gar.)	Z,ZK	5	4P+1C	Z	Z
101MA01	Mathematics 1 Iva Malechová, Iva Slámová, Petra Vacková, Jana ápová, Jozef Bobok, Michal Beneš, Ivana Pultarová, Ond ej Zindulka, Jan Chleboun, Aleš Nekvinda Aleš Nekvinda (Gar.)	Z,ZK	6	2P+3C	Z,L	Z
123CHE	Chemistry Jana Náb Iková, Martin Keppert, Milena Pavlíková Milena Pavlíková Milena Pavlíková (Gar.)	Z,ZK	4	3P+1C	L	Z
132SM01	Structural Mechanics 1 Michal Polák, Daniel Rypl, Mat j Lepš, Jan Sýkora, Tomáš Koudelka, Aleš Pali ka, Karel Pohl, Tomáš Plachý, Martin Válek, Mat j Lepš Michal Polák (Gar.)	Z,ZK	6	2P+2C	Z,L	Z
135GM01	Geomechanics 1 Kate ina Ková ová, Jan Jelínek, Svatoslav Chamra, Richard Malát Kate ina Ková ová Kate ina Ková ová (Gar.)	Z	3	2P+1C	L	Z

Characteristics of the courses of this group of Study Plan: Code=BE20210100 Name=Management a ekonomika ve stavebnictví, 1. semestr

1041/004		7 71/	-
101KG01	Constructive Geometry	Z,ZK	5
Projections and projecti	/e methods. Axonometry. Oblique projection. Orthogonal axonometry. Displaying prisms, cones, cylinders, pyramids, balls. S	imple problems in	axonometry.
Basics of lighting of soli	ds and groupes of solids. Perspective projection. Curves, parametrisation. Frenet's trihedron, torsion and curvature. Helical s	urfaces. Quadrics	. Surfaces in
building industry.			
126DOMT	Development, property valuation and real estate market	Z,ZK	5
The subject provides bas	sic knowledge about the functioning of the commercial and residential real estate market, supplemented by examples from prac	tice in individual n	harket segments.
The development proce	ss and its individual phases from acquisition, through planning, own construction and exit - practical examples. Compilation o	f the cash flow of	the development
project. Financing option	is for development projects and existing investment properties, different aspects of individual types of investors in real estate	projects. The dev	elopment project
consists of a description	of the considered development in the specified area, including a layout design, market analysis, financing proposal, budget a	ind project valuati	on. Development
project (in the form of co	onsultations during the entire semester)		
101MA01	Mathematics 1	Z,ZK	6
https://mat.fsv.cvut.cz/b	ubenik/mat1detail.htm		

123CHE	Chemistry	Z,ZK	4
Introduction to general of	bemistry - chemical bond, compounds, reactions, equilibrium. Chemistry of environment - water, atmosphere, pedosphere.	Chemistry of build	ing materials -
inorganic binders, glass	s, ceramic, metals, natural polymers, wood, synthetic polymers on C and Si basis. Introduction to degradation of building mate	erials and to analy	/tical chemistry.
132SM01	Structural Mechanics 1	Z,ZK	6
Concurrent forces, force	systems acting on rigid bodies in space/plane, moment of a force about a point and line. Supports of a rigid body, reaction fo	orces. Compound	two-dimensional
structures. Trusses. Rea	action forces applying the principle of virtual work.		
135GM01	Geomechanics 1	Z	3
The course focuses on	he understanding of basic geological laws and principles in relation to architecture, civil engineering and urban planning. Em	phasis is placed of	on explaining the
influence of geological p	processes, both endogenous and exogenous, on the rock environment and how the geological situation affects the design of s	tructures and thei	r interaction with
the rock environment. A	t the same time, attention is paid to the technical properties of rocks with regard to their practical applications. The course als	so includes a brie	f introduction to

Code of the group: BE20210200

the regional geology of the Czech Republic.

Name of the group: Management a ekonomika ve stavebnictví, 2. semestr Requirement credits in the group: In this group you have to gain at least 28 credits Requirement courses in the group: In this group you have to complete at least 6 courses Credits in the group: 28 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
101MA02	Mathematics 2 Iva Malechová, Iva Slámová, Hana Lakomá, Petra Vacková, Jana ápová, Jozef Bobok, Michal Beneš, Ivana Pultarová, Ond ej Zindulka, Ivana Pultarová Ivana Pultarová (Gar.)	Z,ZK	6	2P+3C	L,Z	Z
102FYI	Physics Pavel Novák, Tomáš Zbíral, Ji í Konfršt, Petr Pokorný, Jan Trejbal, Pavel Demo, Ji í Novák Pavel Novák Pavel Novák (Gar.)	Z,ZK	4	3P+1C	L	Z
123SH01	Building Materials Alena Vimmrová, Eva Vejmelková, Miloš Jerman Alena Vimmrová Alena Vimmrová (Gar.)	Z,ZK	5	2P+2C	Z,L	Z
126BIM1	BIM Petr Mat jka, Josef Žák Josef Žák Josef Žák (Gar.)	Z	1	1P+1C	Z	Z
132SM02	Structural Mechanics 2 Michal Polák, Daniel Rypl, Mat j Lepš, Jan Sýkora, Tomáš Koudelka, Aleš Pali ka, Martin Válek, Jitka N me ková, Šimon Glanc, Michal Polák Michal Polák (Gar.)	Z,ZK	6	2P+2C	L,Z	Z
154SG01	Land Surveying in Civil Engineering Rudolf Urban, Martin Štroner Rudolf Urban Rudolf Urban (Gar.)	Z,ZK	6	2P+3C	Z,L	Z

Characteristics of the courses of this group of Study Plan: Code=BE20210200 Name=Management a ekonomika ve stavebnictví, 2. semestr

101MA02	Mathematics 2	Z,ZK	6
https://mat.fsv.cvut.cz/v	yuka/bakalari/eng/ls/MT02/		
102FYI	Physics	Z,ZK	4
This is a basic physics	course for students of the study programmes Civil Engineering; Management and Economics in Construction. The course for	uses on mechani	cs and basic
thermodynamics. The for	pllowing areas are covered in the course: Mechanics of material points (particles) and deformable bodies. Discrete and contin	nuous model of m	atter. Kinematics
and dynamics of a mate	erial point (particle). Mechanical force fields. Gravitational field. Mechanical vibrations. Material deformation. Elastic waves. Ac	oustics. Hydrome	chanics.
Fundamentals of therm	odynamics. Heat transfer.		
123SH01	Building Materials	Z,ZK	5
Building materials - bas	s course. Clasification of the materials. Structure of materials. Main properties of materials. Application of materials in buildir	ng constructions. I	ntroduction to
material testing.			
126BIM1	BIM	Z	1
The course focuses on	teaching basic knowledge in the field of Building Information Management (BIM) in theoretical and practical areas, applicable	across different	specialisations
and disciplines of the co	onstruction industry. Students will be introduced to data formats, data standards, intellectual property issues, working with digit	ized documents,	raster and vector
graphics, open data sou	rces in the Czech Republic, ICT and enterprise systems, information systems for the construction industry, but also the contex	t of BIM in the cur	rent construction
industry in relation to th	e entire project life cycle and its specifics (delivery, expert focus, phases of construction projects, etc.) The theoretical knowle	edge is compleme	nted by practical
exercises aimed at mas	tering and understanding the basic principles of object-oriented parametric modelling.		
132SM02	Structural Mechanics 2	Z,ZK	6
Internal forces diagram	s of simple statically determinate plane structures and compound two-dimensional structures. Multiaxially loaded cantilever. D	Definition of norma	al stress and
prepositions of its distri	pution in a cross section. Equivalence of internal forces. Geometry of mass and areas, centre of gravity and moments of inert	ia.	
154SG01	Land Surveying in Civil Engineering	Z,ZK	6
The shape and size of t	he Earth, substitutive surfaces, cartographic projections Horizontal and vertical control, coordinate calculations Quality contro	, ol, deviations and	tolerations in
build-up Angle and dist	ance measurements Heighting measurements Other geodetic methods in build-up (GNSS, DPZ,) Photogrammetry and las	ser scanning Ther	natic mapping
and present state docu	nentation Geodetic works in build-up State map series of CR and thematic maps for build-up Geographic information system	is and spatial plar	nning Cadastre
of real estates Laws an	d decrees for geodesy and build-up in Czech Republic		

Code of the group: BE20210300

Name of the group: Management a ekonomika ve stavebnictví, 3. semestr Requirement credits in the group: In this group you have to gain at least 30 credits

Requirement courses in the group: In this group you have to complete at least 6 courses Credits in the group: 30 Note on the group:

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Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
101MA03	Mathematics 3 Iva Malechová, Jozef Bobok, Michal Beneš, Ond ej Zindulka, Petr Ku era, Zden k Skalák, Martin Hála, Martin Soukenka, Petr Mayer, Michal Beneš Michal Beneš (Gar.)	Z,ZK	6	3P+2C	Z,L	Z
124PSI1	Building Structures 11 Ctislav Fiala, Jan R ži ka, Petr Hájek, Jaroslav Vychytil, B la Stib rková Jan R ži ka Petr Hájek (Gar.)	Z	4	2P+1C	Z	Z
132PRPE	Strength of Materials Petr Kabele, Michal Šejnoha, Milan Jirásek, Jan Vorel, Eva Novotná, Martin Došká, Martin Horák, Martin Lebeda, Barbora Hálková, Milan Jirásek Petr Kabele (Gar.)	Z,ZK	6	3P+2C	Z,L	Z
135GM2I	Geomechanics 2I Jan Salák, Ji í Koš ál, Martin Vaní ek, Ivan Vaní ek Ivan Vaní ek Jan Salák (Gar.)	Z,ZK	5	2P+1C	Z	Z
141HYA	Hydraulics Michal Dohnal, Aleš Havlík, Tomáš Picek, Václav Matoušek, Petr Sklená, Martin Fencl, Anna Špa ková, Jakub Novotný, Vojt ch Bareš, Václav Matoušek Michal Dohnal (Gar.)	Z,ZK	5	2P+2C	Z,L	Z
142VIZP	Water and Environmental Engineering Aleš Havlík, Martin Fencl, Michal Sn hota, Petr Nowak, Tomáš Dostál, Martin Do kal, Martin Šanda, Pavel Fošumpaur, Bohumil Šastný, Martin Horský Ladislav Satrapa (Gar.)	Z,ZK	4	3P+1C	Z,L	Z

Characteristics of the courses of this group of Study Plan: Code=BE20210300 Name=Management a ekonomika ve stavebnictví, 3.

		r	
101MA03	Mathematics 3	Z,ZK	6
https://mat.fsv.cvut.c	z/vyuka/bakalari/eng/zs/		
124PSI1	Building Structures 1I	Z	4
The concept of desig	n of building structures with a comprehensive consideration of the functional requirements imposed on individual elements. Rec	quirements for buil	ding structures,
structural system, in	eraction of elements, spatial effect of the structural system. Vertical load-bearing structures (functions, requirements, principles	of the structural de	esign of walls,
columns), floor struc	ures (functions, requirements, principles of the structural design of vaults, wooden ceilings, reinforced concrete ceilings, cerami	c concrete ceilings	, steel and steel
concrete ceilings). E	pansion joints in load-bearing systems. Structural systems of single and multi-storey buildings, structural systems of long-span	structures.	
132PRPE	Strength of Materials	Z,ZK	6
Fundamentals of the	theory of elasticity: stress and strain of straight beams subjected to bending and free torsion, ultimate plastic capacity of a men	nber in bending, ci	itical loads and
buckling lengths of s	raight compression members. Basic assumptions, quantities, and equations describing the stress and strain state in 3D continu	uum, plates and wa	alls.
40501401		7 71	-
135GM2I	Geomechanics 2I	Z,ZK	5
	Geomechanics 2I asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p	1 7 1	-
		1 7 1	-
Formation of soils, b 141HYA	sic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p	z,ZK	on tasks 5
Formation of soils, b 141HYA A course deals with	asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p Hydraulics	z,ZK	on tasks 5
Formation of soils, b 141HYA A course deals with	asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p Hydraulics ssues of hydrostatics and hydrodynamics with aiming at civil engineering applications. There are analysed tasks related to hydr	z,ZK	on tasks 5
Formation of soils, b 141HYA A course deals with of structures, pipelin 142VIZP	asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p Hydraulics ssues of hydrostatics and hydrodynamics with aiming at civil engineering applications. There are analysed tasks related to hydr e flow, open channel flow and groundwater flow.	roperties, applicat Z,ZK rostatic and hydroc Z,ZK	on tasks 5 ynamic loading 4
Formation of soils, b 141HYA A course deals with of structures, pipelin 142VIZP During the teaching	asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p Hydraulics ssues of hydrostatics and hydrodynamics with aiming at civil engineering applications. There are analysed tasks related to hydre e flow, open channel flow and groundwater flow. Water and Environmental Engineering	roperties, applicat Z,ZK ostatic and hydroc Z,ZK ticular, emphasis is	on tasks 5 ynamic loading 4 s placed on the
Formation of soils, b 141HYA A course deals with of structures, pipelin 142VIZP During the teaching practical aspects of	asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p Hydraulics ssues of hydrostatics and hydrodynamics with aiming at civil engineering applications. There are analysed tasks related to hydre e flow, open channel flow and groundwater flow. Water and Environmental Engineering semester, students are introduced to the fields of water engineering, water management and environmental engineering. In part	roperties, applicat Z,ZK ostatic and hydroc Z,ZK ticular, emphasis is lectures and tutoria	on tasks 5 ynamic loading 4 s placed on the als. The lectures
Formation of soils, b 141HYA A course deals with of structures, pipelin 142VIZP During the teaching practical aspects of are divided thematic	asic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p Hydraulics sues of hydrostatics and hydrodynamics with aiming at civil engineering applications. There are analysed tasks related to hydre flow, open channel flow and groundwater flow. Water and Environmental Engineering semester, students are introduced to the fields of water engineering, water management and environmental engineering. In part vater and environmental engineering in close relation to other branches of civil engineering. The course is taught in the form of I	roperties, applicat Z,ZK ostatic and hydroc Z,ZK ticular, emphasis is lectures and tutoria ngineering). In the	on tasks 5 ynamic loading 4 s placed on the als. The lectures exercises,

Code of the group: BE20210400

Name of the group: Management a ekonomika ve stavebnictví, 4. semestr Requirement credits in the group: In this group you have to gain at least 30 credits Requirement courses in the group: In this group you have to complete at least 6 courses Credits in the group: 30 Note on the group:

Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their Code Completion Credits Scope Semester Role *members*) Tutors, authors and guarantors (gar.) **Building Structures 2I** 124PSI2 Z,ZK 4 2P+1C L Ctislav Fiala, Petr Hájek, Malila Noori, Veronika Ka ma íková, Jaroslav Vychytil, Tereza Pavl , Ji í Pazderka, Ji í Nová ek **Ji í Pazderka** Ji í Pazderka (Gar.) Ζ **Economics and Management** 126EKMN Z,ZK 7 4P+2C Ζ Eduard Hromada, Pavlína Píchová, Martin ásenský, Božena Kade ábková, Petr Kal ev, Pavlína Píchová Eduard Hromada Eduard Hromada (Gar.)

132SM3	Structural Mechanics 3 Tomáš Koudelka, Petr Kabele, Michal Šejnoha, Milan Jirásek, Jan Vorel, Eva Novotná, Martin Horák, Michal Šmejkal, Tomáš Krej í, Aleš Jíra Petr Kabele (Gar.)	Z,ZK	5	2P+2C	L,Z	Z
133NNKB	Fundamentals of Structural Design - Concrete Martin Tipka, Radek Štefan, Jitka Vašková Martin Tipka Martin Tipka (Gar.)	Z,ZK	4	2P+1C	L,Z	Z
134NNKO	Design of Supporting StructuresI - Steel František Wald, Michal Jandera, Martina Eliášová Martina Eliášová (Gar.)	Z,ZK	3	2P+1C	L	Z
136DSUZ	Transport Structures and Urban Planning Ludvík Vébr, František Pospíšil, Ond ej Bret František Pospíšil Ludvík Vébr (Gar.)	Z,ZK	7	5P+1C	L,Z	Z

Characteristics of the courses of this group of Study Plan: Code=BE20210400 Name=Management a ekonomika ve stavebnictví, 4.

124PSI2	Building Structures 2I	Z,ZK	4
Staircases, sloping r	amps, lift shafts - requirements, structural and material solutions, basics of typology, design principles, construction details, railing	. Building foundati	ons - foundation
conditions, types of	foundations, requirements, building plinth area (construction details). Basement - solution of basement walls, requirements, prote	ection against wate	er, waterproofing
systems. Structural	expansion joints in buildings - principles of joints design in bearing structures, thermal expansion, compensation of differences ir	n settlement, cons	truction details.
Roof truss systems.			
126EKMN	Economics and Management	Z,ZK	7
The aim of the cours	se is to provide students with an introduction to economics and management in the construction industry and to familiarize them	with basic econor	nic terms and
their practical applic	ations. Students will be prepared to solve basic construction-management problems in the construction industry. They will acquir	re basic informatio	n about the
method of pricing co	onstruction works and master the basic methods of managing a construction company. Emphasis is placed on understanding the	e principle of econo	omic thinking in
relation to the const	ruction industry.		
132SM3	Structural Mechanics 3	Z,ZK	5
Deformation and for	ce method for the solution of reactions and internal forces on statically indeterminate beams, frames, and truss structures. Calcu	lation of displacer	ments of beams,
frames, and truss st	ructures using the principle of virtual works.		
133NNKB	Fundamentals of Structural Design - Concrete	Z,ZK	4
	Fundamentals of Structural Design - Concrete ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu	1 7 1	•
The content of the s		iding the determin	ation of load
The content of the s effects. The properti	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu	ding the determination are discussed. De	ation of load esign and
The content of the s effects. The properti reinforcement of cor	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclues of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete	iding the determinate are discussed. De ability limit states	ation of load esign and is in the end of
The content of the s effects. The properti reinforcement of cor	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu- es of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete increte structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rse follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia	iding the determinate are discussed. De ability limit states	ation of load esign and is in the end of
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu es of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete acrete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service	are discussed. De ability limit states als, Building Struct Z,ZK	ation of load esign and is in the end of ures).
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The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu- es of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete accrete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rse follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting StructuresI - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of loading the termination of loading the standards.	are discussed. De ability limit states als, Building Struct Z,ZK	ation of load esign and is in the end of ures).
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu- es of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete increte structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rse follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting StructuresI - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of lo	iding the determin are discussed. De ability limit states als, Building Struct Z,ZK Dad effects, design	ation of load ssign and is in the end of ures). 3 differences due 7
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSL	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclues of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete accrete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rese follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting Structures - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of loading individual materials. Transport Structures and Urban Planning	iding the determin- are discussed. De ability limit states als, Building Struct Z,ZK cad effects, design Z,ZK ads and rail transp	ation of load ssign and is in the end of ures). 3 differences due 7 ort - scope 3+1)
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSL and the area of urba	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclues of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete accrete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rese follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting Structures - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of loading of individual materials. Transport Structures and Urban Planning IZ is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (reading to the standard) is the standard of the structures (reading to the standard) is the structure (reading to the standard) is the standard of the structures (reading to the structure) is the structure of transport structures (reading to the structure) is the structure of transport structures (reading to the structure) is the structure of transport structures (reading to the structure) is the structure of transport structure (reading to the structure) is the structure of transport structure (reading to the structure) is the structure of transport structure (reading to the structure) is the structure (reading to t	iding the determin- are discussed. De ability limit states als, Building Struct Z,ZK ad effects, design Z,ZK ads and rail transp g section does not	ation of load sign and is in the end of ures). 3 differences due 7 ort - scope 3+1) end with credit.
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSL and the area of urba Transport Structures	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclues of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete acrete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rese follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting Structures - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of loading individual materials. Transport Structures and Urban Planning Iz is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (roading in planning and spatial planning (scope 2+0). Unlike the road construction and railroad construction sections, the urban planning	iding the determin- are discussed. De ability limit states als, Building Struct Z,ZK ad effects, design Z,ZK ads and rail transp g section does not titons, their impact	ation of load sign and is in the end of ures). 3 differences due 7 rort - scope 3+1) end with credit. on road design.
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSU and the area of urba Transport Structures Design categories of	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclues of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete crete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rese follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting StructuresI - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of low trites of individual materials. Transport Structures and Urban Planning IZ is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (road in planning and spatial planning (scope 2+0). Unlike the road construction and railroad construction sections, the urban planning is - Roads (R): Introduction to basic terminology in the part of roads, history. Road Act and related legislative and technical regula	Iding the determin- are discussed. De ability limit states als, Building Struct Z,ZK ads effects, design Z,ZK ads and rail transp g section does not titons, their impact s, earthwork - dime	ation of load sign and is in the end of ures). 3 differences due 7 rort - scope 3+1) end with credit. on road design.
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSU and the area of urba Transport Structures Design categories of drainage. Urban roa	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclues of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete crete structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rese follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting StructuresI - Steel ning steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of low trites of individual materials. Transport Structures and Urban Planning IZ is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (road in planning and spatial planning (scope 2+0). Unlike the road construction and railroad construction sections, the urban planning is - Roads (R): Introduction to basic terminology in the part of roads, history. Road Act and related legislative and technical regula f roads and motorways, design speed, directional and elevation design of routes, cross-sectional layout of roads and motorways	iding the determin- are discussed. De bability limit states als, Building Struct Z,ZK ad effects, design Z,ZK ads and rail transp g section does not titions, their impact s, earthwork - dime principles. Safety e	ation of load sisign and is in the end of ures). 3 differences due 7 rort - scope 3+1) end with credit. on road design. ensions, shapes, equipment,
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSL and the area of urba Transport Structures Design categories of drainage. Urban roa junctions and crossi	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu- es of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete increte structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rse follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting StructuresI - Steel ing steel, steel-concrete and wooden load-bearing structures according to applicable standards, including the determination of lo intries of individual materials. Transport Structures and Urban Planning IZ is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (roo in planning and spatial planning (scope 2+0). Unlike the road construction and railroad construction sections, the urban planning - Roads (R): Introduction to basic terminology in the part of roads, history. Road Act and related legislative and technical regula f roads and motorways, design speed, directional and elevation design of routes, cross-sectional layout of roads and motorways ds, division and marking, definition of MK space, differences in design, operation and equipment. Carriageway, division, design p	Iding the determin- are discussed. De- bability limit states als, Building Struct Z,ZK ad effects, design Z,ZK ads and rail transp g section does not titions, their impact s, earthwork - dime principles. Safety ev v of security, desig	ation of load sign and is in the end of ures). 3 differences due 7 rort - scope 3+1) end with credit. on road design. ensions, shapes, equipment, n and operation.
The content of the s effects. The properti reinforcement of cor this course. The cou 134NNKO The basics of design to the specific prope 136DSUZ The course 136DSL and the area of urba Transport Structures Design categories of drainage. Urban roa junctions and crossi Tram transport - hist	ubject are the basics of load-bearing concrete structures design and the design methodology according to valid standards, inclu- es of concrete, the production and testing of concrete, the properties of concrete reinforcement and its interaction with concrete increte structures for basic types of loading (bending, shear, pressure) are the main part of this course. An introduction to service rese follows the introductory subject of Civil Engineering program (Structural Mechanics, Elasticity and Strength, Building Materia Design of Supporting StructuresI - Steel individual materials. Transport Structures and Urban Planning IZ is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (road in planning and spatial planning (scope 2+0). Unlike the road construction and railroad construction sections, the urban planning is roads and motorways, design speed, directional and elevation design of routes, cross-sectional layout of roads and motorways design speed, directional and elevation design of routes, cross-sectional layout of roads and motorways design speed, directional and elevation to basic terminology, Issues of railway crossings from the point of view of sections.	iding the determin- are discussed. De- bability limit states als, Building Struct Z,ZK add effects, design Z,ZK ads and rail transp g section does not titions, their impact s, earthwork - dime principles. Safety e v of security, desig iples and paramet	ation of load sign and is in the end of ures). 3 differences due 7 ort - scope 3+1) end with credit. on road design. ensions, shapes, equipment, n and operation. ers, metro lines.

Name of the block: Compulsory courses in the program Minimal number of credits of the block: 116 The role of the block: P

Code of the group: BE20210500

Name of the group: Management a ekonomika ve stavebnictví, 5. semestr Requirement credits in the group: In this group you have to gain at least 30 credits Requirement courses in the group: In this group you have to complete at least 7 courses Credits in the group: 30

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
122TSEK	Technology of Construction - E Mária Párová, Václav Pospíchal, Rostislav Šulc Rostislav Šulc Mária Párová (Gar.)	Z,ZK	6	4P+2C	Z	Р
126EKST	Economic Statistics Božena Kade ábková, Daniel Macek Božena Kade ábková Daniel Macek (Gar.)	Z,ZK	4	1P+2C	Z	Р
126OCS1	Construction Pricing 1 Iveta St elcová, Lucie Brožová, Stanislav Vitásek Lucie Brožová Lucie Brožová (Gar.)	Z,ZK	5	2P+2C	z	Р

126RSPR	Construction Project Management Zita Prost jovská, Jaroslava Tománková Zita Prost jovská Zita Prost jovská (Gar.)	Z,ZK	5	2P+2C	Z	Р
126SRPB	Facility Management and Operation Daniel Macek, Aleš Choutka Daniel Macek Daniel Macek (Gar.)	Z,ZK	4	1P+2C	Z	Р
126SLEG	Building Legislation Dana M š anová Dana M š anová Dana M š anová (Gar.)	Z	2	2P	Z	Р
135ZSE	Foundations E Josef Jettmar, Jan Kos, Jan Masopust Jan Pruška Jan Kos (Gar.)	Z,ZK	4	2P+2C	Z	Р

Characteristics of the courses of this group of Study Plan: Code=BE20210500 Name=Management a ekonomika ve stavebnictví, 5. semestr

122TSEK	Technology of Construction - E	Z,ZK	6
Earthwork, design c	f pit excavation and supporting's technologies. Design of formwork. Concrete mixer plant, concrete conveying, concreting. Brick	work's technologies	s, Roofing work,
tin work.			
126EKST	Economic Statistics	Z,ZK	4
The content of the s	ubject is applied economic statistics. Familiarization with statistical theory and subsequent application to solved examples.		
126OCS1	Construction Pricing 1	Z,ZK	5
Costs are operation-	related consumption of work and resources, valued and expressed in monetary units. The aim of the course is to teach the studen	t to use basic calcula	ation techniques
and procedures. Fur	rthermore, use the normative and data base, and adapt the normative base for new materials and technologies, or creating. Ba	sic principles of cos	t calculation in
the construction ind	ustry. Organization and standardization of work in the company, production process, time consumption. Standardization of labo	r consumption, meth	nods of setting
standards, examples	s, documents. Standardization of material consumption, examples, documents. Standardization of the need for machines - produc	tivity, capacity stand	ards, examples
documents. Salary c	costs - payroll system, job catalog, wage rate calculation. Costs - breakdown of costs, calculation methods and techniques, calculation	ation bases. Dynamic	c and normative
	n, examples, documents. Individual costing - costing formula, content of components, examples, documents. Methods of non-a		
variable costs), exar	nples. Influencing the amount of material costs, wages, machine operation, overhead. Cost modeling, break-even analysis, examples and the second se	mples. Managerial co	oncept of costs
126RSPR	Construction Project Management	Z,ZK	5
The subject provide	s a basic overview of project management. It defines the life cycle of a construction project. Content of individual phases of the	project life cycle. Pr	eparation and
The subject provide			oparation and
			oparation and
evaluation of the co		Z,ZK	4
evaluation of the con 126SRPB	nstruction project.	Z,ZK	4
evaluation of the con 126SRPB The content of the s	Instruction project.	Z,ZK	4 ementation and
evaluation of the con 126SRPB The content of the s operation of facility r	nstruction project. Facility Management and Operation ubject is the management and control of the operation of buildings using the support of modern technologies. Familiarization wi	Z,ZK	4 ementation and
evaluation of the con 126SRPB The content of the s operation of facility r	nstruction project. Facility Management and Operation ubject is the management and control of the operation of buildings using the support of modern technologies. Familiarization wi nanagement using the CAFM system. The focus of the software support will be both on the passportization of basic property dat	Z,ZK	4 ementation and
evaluation of the con 126SRPB The content of the s operation of facility r management and ev 126SLEG	Instruction project. Facility Management and Operation ubject is the management and control of the operation of buildings using the support of modern technologies. Familiarization wi nanagement using the CAFM system. The focus of the software support will be both on the passportization of basic property dat valuation of the most frequently used facility management processes.	Z,ZK th the issues of implication a and, in particular, complete Z	4 ementation and on the planning 2
evaluation of the con 126SRPB The content of the s operation of facility r management and ev 126SLEG Territorial planning a	Instruction project. Facility Management and Operation ubject is the management and control of the operation of buildings using the support of modern technologies. Familiarization wi nanagement using the CAFM system. The focus of the software support will be both on the passportization of basic property dat valuation of the most frequently used facility management processes. Building Legislation	Z,ZK th the issues of implication a and, in particular, complete Z	4 ementation and on the planning 2
evaluation of the con 126SRPB The content of the s operation of facility r management and ev 126SLEG Territorial planning a conclusion of a futur	Instruction project.	Z,ZK th the issues of implication a and, in particular, complete Z	4 ementation and on the planning 2
evaluation of the con 126SRPB The content of the sopperation of facility r management and ev 126SLEG Territorial planning a conclusion of a futur 135ZSE	Instruction project.	Z,ZK th the issues of imple a and, in particular, of Z z z z z z z z z z z z z z z z z z z	4 ementation and on the planning 2 contract of the 4
evaluation of the con 126SRPB The content of the s operation of facility r management and ev 126SLEG Territorial planning a conclusion of a futur 135ZSE Úvod do p edm tu,	Instruction project.	Z,ZK th the issues of imple a and, in particular, of Z es in construction - of Z,ZK Wezní stavy plošnýc	4 ementation and on the planning 2 contract of the 4 h základ ,
evaluation of the con 126SRPB The content of the s operation of facility r management and ev 126SLEG Territorial planning a conclusion of a futur 135ZSE Úvod do p edm tu, výpo et únosnosti a	Instruction project.	Z,ZK th the issues of imple a and, in particular, of Z es in construction - of Z,ZK Mezní stavy plošnýcosam lých pilot, zat	4 ementation and on the planning 2 contract of the 4 h základ , žovací zkoušky
evaluation of the con 126SRPB The content of the sopperation of facility rean nanagement and even 126SLEG Territorial planning a conclusion of a futur 135ZSE Úvod do p edm tu, rýpo et únosnosti a pilot Stanovení únos am Zásady pro návo	Instruction project.	Z,ZK th the issues of impli- a and, in particular, of Z es in construction - of Z,ZK Wezní stavy plošnýcosam lých pilot, zat ámy, technologie pa:	4 ementation and on the planning 2 contract of the 4 h základ , žovací zkoušky žení stavebních

Code of the group: BE20230600

Name of the group: Management a ekonomika ve stavebnictví, 6. semestr Requirement credits in the group: In this group you have to gain at least 30 credits Requirement courses in the group: In this group you have to complete at least 7 courses Credits in the group: 30

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
124KKT	Completing Constructions Malila Noori, Šárka Šilarová, Pavel Kopecký Šárka Šilarová Šárka Šilarová (Gar.)	Z,ZK	6	2P+3C	L	Р
126IMAB	Building Information Management (BIM) Petr Mat jka, Josef Žák Josef Žák Josef Žák (Gar.)	Z,ZK	5	1P+3C	L	Ρ
126OCS2	Construction Pricing 2 Renáta Schneiderová Heralová, Iveta St elcová, Lucie Brožová, Stanislav Vitásek Lucie Brožová Renáta Schneiderová Heralová (Gar.)	Z,ZK	7	2P+4C	L	Р
126PJMS	Marketing in construction - project Kate ina Eklová, Eduard Hromada Eduard Hromada (Gar.)	KZ	3	2C	L	Ρ
126SWPX	Software for Business Practice Petr Dlask Petr Dlask Petr Dlask (Gar.)	Z	2	2C	L	Ρ
126VEIN	Public Investment Construction Renáta Schneiderová Heralová, Zita Prost jovská Zita Prost jovská Renáta Schneiderová Heralová (Gar.)	Z,ZK	3	2P+1C	L	Р
133BZE	Concrete and Masonry Structures E Michaela Frantová Michaela Frantová (Gar.)	Z,ZK	4	2P+2C	L	Ρ

Characteristics of the courses of this group of Study Plan: Code=BE20230600 Name=Management a ekonomika ve stavebnictví, 6. semestr

124KKT Completing Constructions	Z,ZK	6
Construction principles of the design of roof coverings for flat, sloping and steep roofs. The design of roof coverings in terms of requirements: building p	hysical, waterproo	fing, operational,
static, fire, acoustic, biological, chemical, lifetime and recycling. Principles of design of additional elements and details of roof coverings of flat, slopi	ng and steep roof:	s based on the
stated requirements and given boundary conditions. Designing and the ability to select suitable assembly structures based on the theories of design	n principles and th	e principles of
solving individual groups of elements from the area of assembly structures. This involves the creation of insulation systems, windows and doors, into	ernal dividing walls	s, floors and floor
structures and their details.		
126IMAB Building Information Management (BIM)	Z,ZK	5
The subject deals with the issue of Building Information Modeling (BIM) as a modern tool for the design, construction and operation of construction	projects. It focuse	s on advanced
applications of information technology in construction and design companies. Software tools that are used for quality control, measurement, prepar-	ation of measurem	ient statements,
simulation of construction progress, robotics in land and transport constructions and cybercrime, its risks and measures in construction projects. Pa	rt of the content o	f the subject is
information on the contractual provision of digitization on construction projects.		
126OCS2 Construction Pricing 2	Z,ZK	7
Price and its importance, price factors, price strategies, types of contract, estimating at different stages of project, price setting data. Price creation	- oriented to costs	, demand and
competition, method of price creation. Methods of creating the bid price. Labor and equipment rates per hour. IT support for estimating. Engineering	and design activi	ties pricing.
126PJMS Marketing in construction - project	KZ	3
The course introduces students to basic concepts and techniques in the field of marketing, the links between marketing and other activities in the c	onstruction compa	iny, its role in the
construction company and in society. Students should learn to find market opportunities, segment the market, evaluate market opportunities, build a	a simple marketing	g mix, i.e. know
and master promotion methods, master pricing principles, correctly define the product and determine distribution channels.		
126SWPX Software for Business Practice	Z	2
Modern construction practice requires the application of various supporting tools and methods. The course is focused on acquire practical skills in u	iser control not on	ly of office
applications (especially MS Excel). The aim is to improve their existing skills and acquire new ones to save time at work. The main goal is to focus of	n such skills that a	are applicable in
continuing subjects and practice. It includes the verification of knowledge when creating examples in the exercise.		
126VEIN Public Investment Construction	Z,ZK	3
Public sector investment project. Evaluation of revenues and costs, income and expenses in individual phases of the life cycle of the construction pi	oject. Risk and un	certainty in
investment decision-making.		
133BZE Concrete and Masonry Structures E	Z,ZK	4
The course lectures is focused on the design of one-way and two-way slabs, staircases, reinforcing walls, foundations, precast structures, halls and	prestressed conc	rete. The course
also covers masonry construction and an introduction to the design of civil engineering structures and bridges. The content of the practicum is the a	application of the k	nowledge and
skills acquired in lectures to a specific project that students also work with in other courses as part of their studies.		

Code of the group: BE20230700

Name of the group: Management a ekonomika ve stavebnictví, 7. semestr Requirement credits in the group: In this group you have to gain at least 30 credits Requirement courses in the group: In this group you have to complete at least 8 courses Credits in the group: 30

Note on the group:

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
124PE1	Structural design project E Malila Noori, Lenka Hanzalová, B la Stib rková, Šárka Šilarová Ji í Pazderka Ji í Pazderka (Gar.)	KZ	4	4C	Z	Ρ
125TBUE	Building Services Systems E Ilona Koubková, Karel Kabele, Zuzana Veverková Daniel Adamovský Ilona Koubková (Gar.)	Z,ZK	5	2P+2C	Z	Ρ
126DUCE	Tax System and Accounting Jana Frková, Olga Heralová Olga Heralová Jana Frková (Gar.)	Z,ZK	4	2P+1C	L	Р
126PJOC	Construction Pricing Project Iveta St elcová, Dana ápová Iveta St elcová Iveta St elcová (Gar.)	KZ	4	4C	L	Р
126PRS	Construction Planning and Management Lucie Brožová, Jaroslava Tománková Lucie Brožová Petr Dlask (Gar.)	Z,ZK	5	2P+3C	L	Р
126RPRO	Construction Process Management Michal Vondruška Michal Vondruška (Gar.)	Z,ZK	3	1P+1C	Z	Р
1340DKM	Steel and Timber Structures Anna Kuklíková, Michal Netušil Michal Netušil Anna Kuklíková (Gar.)	Z,ZK	5	2P+2C	Z,L	Р
100ODPR	Industrial Training (3 weeks) Jan R ži ka, Petr Hájek, Kate ina Sojková Michal Jandera Michal Jandera (Gar.)	Z	0	6C	Z,L	Ρ

Characteristics of the courses of this group of Study Plan: Code=BE20230700 Name=Management a ekonomika ve stavebnictví, 7. semestr

124PE1	Structural design project E	KZ	4			
Converting an architectural study of a smaller or medium-sized building for housing, administration, education, culture or sports into a detailed design of a building structure based on						
static analysis, interaction	on of load-bearing and non-load-bearing elements and building physics. Focus on complex approach to practical design, analy	sis and optimaliza	tion of a building			
structures. Design of va	riants of the load-bearing system, preliminary static analysis (calculation of load-bearing elements - slabs, columns, walls, etc)	, calculation of fou	ndations, design			
of structures on the buil	ding envelope with respect to thermal protection of buildings, building physics, fire protection of buildings and protection agai	inst water and soil	moisture.			
Elaboration of detailed	Elaboration of detailed drawings including floor plans, sections and details.					
125TBUE	Building Services Systems E	Z,ZK	5			
Basic course in building	sic course in building services systems - water supply, drainage, gas supply , heating and ventilation systems.					

126DUCE	Tax System and Accounting	Z.ZK	4			
	Tax System and Accounting	, ,				
-	nto lectures 1 hour per week and exercises 1 hour per week. Lectures take place according to the course outline listed below					
	their own business plan for a selected business activity according to the specified syllabus. Firstly students will work in team with intention to understand connections among tax,					
expenditure policy and	will suggest tax adjustments to reduce deficit. The will learn how to prepare Income tax return, Social security and Health Ins	urance return. Stu	udents will train			
how to read and evalua	te Financial Statements and compute VAT.					
126PJOC	Construction Pricing Project	KZ	4			
The aim of this course i	s to introduce students to the budgeting and cost planning of building structures and construction works. Students will carry of	out their own proje	ects and draw up			
three budget plans usin	g the software KROS. The main task of students will be to create a bill of quantities according to the regulation 169/2016 and	to correctly use	the URS CZ			
database. The students	will use the project documentation of real building structures (the estimate budget should be more than 15 million).					
126PRS	Construction Planning and Management	Z,ZK	5			
Construction project ma	nagement, project life cycle, engineering, design phase, methods of time scheduling, cost management, procurement syster	ms and contracts,	, contractor			
management. Safety, q	uality and environmental management.					
126RPRO	Construction Process Management	Z,ZK	3			
The course will focus of	n managerial and technical-economic planning during the basic technological processes of construction. The main focus will	be on managerial	skills in the			
management and contr	ol of building capacities and mechanization from the point of view of the contractor. Students will be acquainted with the princ	ciples of practical	cost calculation			
of individual technologie	cal processes of construction. Teaching topics will be explained in case studies.					
134ODKM	Steel and Timber Structures	Z,ZK	5			
Steel structures - pros a	nd contras, material properties, fabrication, connections, industrial steel buildings, cables, high strength steel, buildings in te	rms of water engi	ineering - load,			
protection, utilization. Timber - loadings, material propertie, limit states methodology, design, connections, bracings, protection of structural timber, timber bridges.						
1000DPR	Industrial Training (3 weeks)	Z	0			
Professional practice is	an important part of academic education in undergraduate degree programmes. The student will gain a basic understanding	of duties and pro	fessional			
responsibilities. The pro	esponsibilities. The professional practice evaluates the sum of all knowledge acquired through previous theoretical studies and is a proof of their acquisition.					

Code of the group: BE20240800

Name of the group: Management a ekonomika ve stavebnictví, 8. semestr Requirement credits in the group: In this group you have to gain at least 14 credits Requirement courses in the group: In this group you have to complete at least 3 courses Credits in the group: 14

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
126FINK	Financing, Investing, Contracts Martin ásenský, Aleš Tomek, Radan Tomek Aleš Tomek Aleš Tomek (Gar.)	Z,ZK	5	2P+2C	L	Ρ
126OINS	Pricing of Civil Engineering Works Iveta St elcová, Stanislav Vitásek Iveta St elcová Iveta St elcová (Gar.)	Z,ZK	4	2P+2C	L	Р
126PJRS	Construction Preparation and Management Project Lucie Brožová, Dana ápová, Jaroslava Tománková Lucie Brožová Lucie Brožová (Gar.)	КZ	5	4C	L	Ρ

Characteristics of the courses of this group of Study Plan: Code=BE20240800 Name=Management a ekonomika ve stavebnictví, 8. semestr

126FINK	Financing, Investing, Contracts	Z,ZK	5			
1260INS	Pricing of Civil Engineering Works	Z,ZK	4			
Cost database of transportation structures I normative prices, aggregated items Cost database of transportation structures II OTSKP catalogue Schedule of works and bill of quantities						
requirements and source	es Cost estimation of transportation structures basic principles, techniques Financing of transportation structures EU, SFDI,	PPP projects Cos	st analysis of			
transportation structure	s real projects and cost categories Engineering constructions from the perspective of contracting authority legal norms and a	another legislature	Engineering			
constructions from the p	erspective of contractor managing of a contract within the construction company Life cycle costs of engineering constructions Ec	conomic efficiency	of transportation			
structures Introduction	to estimating software for transportation structures Building information modelling (BIM) and estimating requirements, schedu	ule of works Intern	ational methods			
of planning, estimating	of planning, estimating and predicting transportation structure costs					
126PJRS	Construction Preparation and Management Project	KZ	5			
Complex project of construction preparation, planning, technical preparation and simulation of building execution on the basis of individual assignment for each student.						

Code of the group: BE20210800_2

Name of the group: Management a ekonomika ve stavebnictví, bakalá ská práce Requirement credits in the group: In this group you have to gain at least 12 credits Requirement courses in the group: In this group you have to complete at least 1 course Credits in the group: 12

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
126BAPE	Bachelor Thesis Josef Žák, Iveta St elcová Jan Pruška Jan Pruška (Gar.)	Z	12	10C	L,Z	Р

Characteristics of the courses of this group of Study Plan: Code=BE20210800_2 Name=Management a ekonomika ve stavebnictví, bakalá ská práce

126BAPE Bachelor Thesis

The bachelor thesis finishes the bachelor study. A student proves that he/she is able to apply the knowledge acquired in the study on the real project. The bachelor thesis connects to the chosen subjects of the study curricula. The partial results are further evaluated and appropriate conclusions are drawn. Min. 4 continuous consultations with the head of bachelor study, where the student submits bachelor study in progress. For students of branch E.

7

12

Name of the block: Povinná t lesná výchova, sportovní kurzy Minimal number of credits of the block: 0 The role of the block: PT

Code of the group: BTV_POV Name of the group: Povinná t lesná výchova Requirement credits in the group: Requirement courses in the group: In this group you have to complete at least 2 courses 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
TV1	Physical Education	Z	0	0+2	Z	PT
TV2	Physical Education	Z	0	0+2	L	PT

Characteristics of the courses of this group of Study Plan: Code=BTV_POV Name=Povinná t lesná výchova

enal deteriories e						
TV1	Physical Education	Z	0			
TV2	Physical Education	Z	0			

Name of the block: Compulsory elective courses Minimal number of credits of the block: 4 The role of the block: S

Code of the group: BE20210800_1

Name of the group: Management a ekonomika ve stavebnictví, PV p edm ty Requirement credits in the group: In this group you have to gain at least 4 credits Requirement courses in the group: In this group you have to complete at least 1 course Credits in the group: 4

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
126YIPD	Small Business Jana Frková, Olga Heralová Olga Heralová Petr Kal ev (Gar.)	Z,ZK	4	2P+2C	L	S
126YSWO	Construction Estimation Software Lucie Brožová, Dana ápová Lucie Brožová Lucie Brožová (Gar.)	Z,ZK	4	2P+2C	L	S
126YTRO	Decision theory Eduard Hromada Eduard Hromada (Gar.)	Z,ZK	2	1P+1C	L	S
126ZIPN	Basics of innovative business Dana M š anová Dana M š anová Dana M š anová (Gar.)	Z,ZK	2	1P+1C	L	S
126YPER	Human resource management Eduard Hromada, Olga Heralová Michal Vondruška Michal Vondruška (Gar.)	Z,ZK	2	1P+1C	L	S
126MCC	Management in Construction Company Aleš Tomek	Z,ZK	5	2P+2C	L	S

Characteristics of the courses of this group of Study Plan: Code=BE20210800_1 Name=Management a ekonomika ve stavebnictví, PV p edm ty

126YIPD	Small Business	Z,ZK	4			
126YSWO	Construction Estimation Software	Z,ZK	4			
The teaching is focus	The teaching is focused on familiarization with cost calculation SW for item preparation					
126YTRO	Decision theory	Z,ZK	2			
126ZIPN	Basics of innovative business	Z,ZK	2			
126YPER	Human resource management	Z,ZK	2			
Main intention is to make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leadership and remuneration. Within classes theory is combined with trainings (model situations).						

126MCC

Management in Construction Company

Nature of Construction Business Primary Causes of Business Failure, External and Internal Influences Business Strategies to Minimize the Risk of Business Failure Business Development, Marketing and Bidding Planning Strategies Plan Implementation/Control Strategies Financial Management Strategies Construction Risk Management Leadership Challenges Organizational Behavior Corporate & amp; Employee Ethics Company Performance Checklist Managing Profitable Construction Business Lectures are based on the real practice experience of all course's lecturers and various case studies are studied and solved. Online Building Industry Game (BIG) will be played by all course participants through the whole semester (a computer simulation of a realistic business environment where participants play the role of contractors, competing in a market with variable demand for construction work). In this online game, developed and directly operated by the California Polytechnic State University, students act as contractors, managing both, their companies and projects.

7 7K

Name of the block: Jazyky Minimal number of credits of the block: 3 The role of the block: J

Code of the group: BF20190101_I Name of the group: Povinn volitelný jazyk, 1. semestr Requirement credits in the group: In this group you have to gain at least 1 credit Requirement courses in the group: In this group you have to complete at least 1 course Credits in the group: 1 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
104YCA1	English 1 Hana Horká, Petra Martincová, Petra Florianová, Sandra Giormani, Svatava Boboková Bartíková, V ra ermáková, Karolína Synková, Alexandra Steinerová, Elena Da eva, Svatava Boboková Bartíková Sandra Giormani (Gar.)	Z	1	2C	Z,L	J
104YCN1	German 1 Svatava Boboková Bartíková Svatava Boboková Bartíková Svatava Boboková Bartíková (Gar.)	Z	1	2C	Z,L	J

Characteristics of the courses of this group of Study Plan: Code=BF20190101_I Name=Povinn volitelný jazyk, 1. semestr

104YCA1 English 1

English 1 Course code: 104Y CA1 Scope: 0 + 2 (practical sessions) Number of credits: 1 Final assessment: credit The aim of the compulsory English course is to enhance the knowledge of lexis and grammar within the scope of the chosen field of study and university studies in general (Academic English); the overall focus is on professional language (i.e., ESP - technical style) and communicative competence within the construction industry. The course also seeks to teach students to read technical literature and to be able to produce essential written discourse and to express themselves in writing on issues in their field of study. The end of course requirements are a credit. Literature: Horká Hana, Giormani Sandra, Martincová Petra, Nivenová Renata : Professional English for Civil Engineering (Units 1 - 5)

 104YCN1
 German 1

The compulsory course - German Language for Civil Engineering is aimed at practising professional vocabulary within the scope of the construction industry, understanding professional texts, and learning the necessary presentation skills in order to present all relevant professional issues. The end-of-course requirement is a credit. Literature: A.Hanáková, J.Dressel: Deutsch im Bauwesen

Code of the group: BF20190202_I

Name of the group: Povinn volitelný jazyk, 2. semestr

Requirement credits in the group: In this group you have to gain at least 2 credits Requirement courses in the group: In this group you have to complete at least 1 course Credits in the group: 2

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
104YC2A	English 2 Hana Horká, Petra Martincová, Petra Florianová, Sandra Giormani, Svatava Boboková Bartíková, V ra ermáková, Karolína Synková, Alexandra Steinerová, Elena Da eva, Svatava Boboková Bartíková Sandra Giormani (Gar.)	Z,ZK	2	2C		J
104YC2N	German 2 Svatava Boboková Bartíková Sandra Giormani Svatava Boboková Bartíková (Gar.)	Z,ZK	2	2C		J

Characteristics of the courses of this group of Study Plan: Code=BF20190202_I Name=Povinn volitelný jazyk, 2. semestr

 104YC2A
 English 2
 Z,ZK
 2

 English 2 Course code: 104YC2A Scope: 0 + 2 (practical sessions) Number of credits: 1 Final assessment: credit and exam The aim of the compulsory English course is to enhance the knowledge of lexis and grammar within the scope of the chosen field of study and university studies in general (Academic English); the overall focus is on professional language (i.e., ESP - technical style) and communicative competence within the construction industry. The course also seeks to teach students to read technical literature and to be able to produce essential written discourse and to express themselves in writing on issues in their field of study. The end of course requirements are a credit and an examination. Literature: Horká Hana, Giormani Sandra, Martincová Petra, Nivenová Renata : Professional English for Civil Engineering (Units 6 10)

104YC2N	German 2	Z,ZK	2	
The compulsory course - German Language for Civil Engineering is aimed at practising professional vocabulary within the scope of the construction industry, understanding professional				
texts, and learning the necessary presentation skills in order to present all relevant professional issues. The end-of-course requirement is a credit. Literature: A.Hanáková, J.Dressel:				
Deutsch im Bauwesen				

List of courses of this pass:

Code	Name of the course	Completion	Credits			
1000DPR	Industrial Training (3 weeks)	Z	0			
	Professional practice is an important part of academic education in undergraduate degree programmes. The student will gain a basic understanding of duties and professional					
	sibilities. The professional practice evaluates the sum of all knowledge acquired through previous theoretical studies and is a proof o					
101KG01	Constructive Geometry	Z,ZK	5			
	rojective methods. Axonometry. Oblique projection. Orthogonal axonometry. Displaying prisms, cones, cylinders, pyramids, balls. Sirr of solids and groupes of solids. Perspective projection. Curves, parametrisation. Frenet's trihedron, torsion and curvature. Helical sur		-			
Dasies of lighting	building industry.	laces. Quaulics. S				
101MA01	Mathematics 1	Z,ZK	6			
	https://mat.fsv.cvut.cz/bubenik/mat1detail.htm],				
101MA02	Mathematics 2	Z,ZK	6			
	https://mat.fsv.cvut.cz/vyuka/bakalari/eng/ls/MT02/					
101MA03	Mathematics 3	Z,ZK	6			
	https://mat.fsv.cvut.cz/vyuka/bakalari/eng/zs/					
102FYI	Physics	Z,ZK	4			
	ysics course for students of the study programmes Civil Engineering; Management and Economics in Construction. The course focu he following areas are covered in the course: Mechanics of material points (particles) and deformable bodies. Discrete and continuou					
	of a material point (particle). Mechanical force fields. Gravitational field. Mechanical vibrations. Material deformation. Elastic waves. A					
	Fundamentals of thermodynamics. Heat transfer.	,				
104YC2A	English 2	Z,ZK	2			
e e	code: 104YC2A Scope: 0 + 2 (practical sessions) Number of credits: 1 Final assessment: credit and exam The aim of the compulsory	•				
-	exis and grammar within the scope of the chosen field of study and university studies in general (Academic English); the overall focu	-				
	ical style) and communicative competence within the construction industry. The course also seeks to teach students to read technica written discourse and to express themselves in writing on issues in their field of study. The end of course requirements are a credit a					
produce essential	Horká Hana, Giormani Sandra, Martincová Petra, Nivenová Renata : Professional English for Civil Engineering (Units 6 10		. Enclature.			
104YC2N	German 2	Z,ZK	2			
	urse - German Language for Civil Engineering is aimed at practising professional vocabulary within the scope of the construction indus		professional			
texts, and learning	the necessary presentation skills in order to present all relevant professional issues. The end-of-course requirement is a credit. Liter	ature: A.Hanáková	, J.Dressel:			
10.000	Deutsch im Bauwesen					
104YCA1	English 1		1			
	ode: 104Y CA1 Scope: 0 + 2 (practical sessions) Number of credits: 1 Final assessment: credit The aim of the compulsory English cours nmar within the scope of the chosen field of study and university studies in general (Academic English); the overall focus is on profes		•			
-	communicative competence within the construction industry. The course also seeks to teach students to read technical literature and					
written discourse ar	nd to express themselves in writing on issues in their field of study. The end of course requirements are a credit. Literature: Horká Hana	, Giormani Sandra	, Martincová			
	Petra, Nivenová Renata : Professional English for Civil Engineering (Units 1 - 5)					
104YCN1	German 1	Z	1			
	urse - German Language for Civil Engineering is aimed at practising professional vocabulary within the scope of the construction indus the necessary presentation skills in order to present all relevant professional issues. The end-of-course requirement is a credit. Liter					
lexis, and learning	Deutsch im Bauwesen	alure. A.Harlakova	, J.DIESSEI.			
122TSEK	Technology of Construction - E	Z,ZK	6			
	of pit excavation and supporting's technologies. Design of formwork. Concrete mixer plant, concrete conveying, concreting. Brickwork		-			
	tin work.					
123CHE	Chemistry	Z,ZK	4			
•	neral chemistry - chemical bond, compounds, reactions, equilibrium. Chemistry of environment - water, atmosphere, pedosphere. Ch	, ,				
-	glass, ceramic, metals, natural polymers, wood, synthetic polymers on C and Si basis. Introduction to degradation of building materia	-	-			
123SH01 Building materials	- basis course. Clasification of the materials. Structure of materials. Main properties of materials. Application of materials in building	Z,ZK	5			
Duliding materials	material testing.					
124KKT	Completing Constructions	Z,ZK	6			
	les of the design of roof coverings for flat, sloping and steep roofs. The design of roof coverings in terms of requirements: building physi		operational,			
	c, biological, chemical, lifetime and recycling. Principles of design of additional elements and details of roof coverings of flat, sloping	-				
	ts and given boundary conditions. Designing and the ability to select suitable assembly structures based on the theories of design p		-			
solving individual groups of elements from the area of assembly structures. This involves the creation of insulation systems, windows and doors, internal dividing walls, floors and floor structures and their details.						
124PE1	Structural design project E	KZ	4			
	itectural study of a smaller or medium-sized building for housing, administration, education, culture or sports into a detailed design o	1	1			
-	action of load-bearing and non-load-bearing elements and building physics. Focus on complex approach to practical design, analysis	-				
-	of variants of the load-bearing system, preliminary static analysis (calculation of load-bearing elements - slabs, columns, walls, etc), cal		-			
of structures on	the building envelope with respect to thermal protection of buildings, building physics, fire protection of buildings and protection again	nst water and soil r	moisture.			
1	Elaboration of detailed drawings including floor plans, sections and details.					

124PSI1	Building Structures 1I	Z	4		
The concept of des	ign of building structures with a comprehensive consideration of the functional requirements imposed on individual elements. Requir	ements for building	structures,		
structural system, interaction of elements, spatial effect of the structural system. Vertical load-bearing structures (functions, requirements, principles of the structural design of walls,					
columns), floor structures (functions, requirements, principles of the structural design of vaults, wooden ceilings, reinforced concrete ceilings, ceramic concrete ceilings, steel and steel					
	e ceilings). Expansion joints in load-bearing systems. Structural systems of single and multi-storey buildings, structural systems of lo	ng-span structures.			
124PSI2	Building Structures 2I	Z,ZK	4		
	ramps, lift shafts - requirements, structural and material solutions, basics of typology, design principles, construction details, railing. Bu	-			
	foundations, requirements, building plinth area (construction details). Basement - solution of basement walls, requirements, protectic	-			
systems. Structura	l expansion joints in buildings - principles of joints design in bearing structures, thermal expansion, compensation of differences in se Roof truss systems.	ettlement, construct	tion details.		
125TBUE	Building Services Systems E	Z,ZK	5		
IZOIDUE	Basic course in building services systems - water supply, drainage, gas supply, heating and ventilation systems.	,ZR	5		
		7	40		
126BAPE	Bachelor Thesis s finishes the bachelor study. A student proves that he/she is able to apply the knowledge acquired in the study on the real project. Th	. – .	12		
	is of the study curricula. The partial results are further evaluated and appropriate conclusions are drawn. Min. 4 continuous consultat				
	study, where the student submits bachelor study in progress. For students of branch E.	ions with the nead			
126BIM1	BIM	Z	1		
	s on teaching basic knowledge in the field of Building Information Management (BIM) in theoretical and practical areas, applicable a	. – .	rialisations		
	the construction industry. Students will be introduced to data formats, data standards, intellectual property issues, working with digitized	-			
	sources in the Czech Republic, ICT and enterprise systems, information systems for the construction industry, but also the context of				
	to the entire project life cycle and its specifics (delivery, expert focus, phases of construction projects, etc.) The theoretical knowledge				
, <u>,</u>	exercises aimed at mastering and understanding the basic principles of object-oriented parametric modelling.		.,,		
126DOMT	Development, property valuation and real estate market	Z,ZK	5		
	s basic knowledge about the functioning of the commercial and residential real estate market, supplemented by examples from practice	· · ·	t segments.		
The development p	rocess and its individual phases from acquisition, through planning, own construction and exit - practical examples. Compilation of the	e cash flow of the d	evelopment		
project. Financing c	ptions for development projects and existing investment properties, different aspects of individual types of investors in real estate pro	jects. The developr	nent project		
consists of a descri	ption of the considered development in the specified area, including a layout design, market analysis, financing proposal, budget and	project valuation. D	evelopment		
	project (in the form of consultations during the entire semester)				
126DUCE	Tax System and Accounting	Z,ZK	4		
The subject is divid	ed into lectures 1 hour per week and exercises 1 hour per week. Lectures take place according to the course outline listed below. In	the exercise, stude	nts prepare		
their own busine	ss plan for a selected business activity according to the specified syllabus. Firstly students will work in team with intention to understa	and connections ar	nong tax,		
expenditure policy	and will suggest tax adjustments to reduce deficit. The will learn how to prepare Income tax return, Social security and Health Insura	ance return. Studer	nts will train		
	how to read and evaluate Financial Statements and compute VAT.				
126EKMN	Economics and Management	Z,ZK	7		
The aim of the cou	urse is to provide students with an introduction to economics and management in the construction industry and to familiarize them w	ith basic economic	terms and		
	plications. Students will be prepared to solve basic construction-management problems in the construction industry. They will acquire				
method of pricing of	construction works and master the basic methods of managing a construction company. Emphasis is placed on understanding the pr	inciple of economic	thinking in		
	relation to the construction industry.				
126EKST	Economic Statistics	Z,ZK	4		
	The content of the subject is applied economic statistics. Familiarization with statistical theory and subsequent application to solved		_		
126FINK	Financing, Investing, Contracts	Z,ZK	5		
126IMAB	Building Information Management (BIM)	Z,ZK	5		
	with the issue of Building Information Modeling (BIM) as a modern tool for the design, construction and operation of construction pro				
	rmation technology in construction and design companies. Software tools that are used for quality control, measurement, preparation				
simulation of cons	truction progress, robotics in land and transport constructions and cybercrime, its risks and measures in construction projects. Part of	of the content of the	e subject is		
1001400	information on the contractual provision of digitization on construction projects.				
126MCC	Management in Construction Company	Z,ZK	5		
	ion Business Primary Causes of Business Failure, External and Internal Influences Business Strategies to Minimize the Risk of Business		-		
, e	ng Planning Strategies Plan Implementation/Control Strategies Financial Management Strategies Construction Risk Management Leader		•		
	te & amp; Employee Ethics Company Performance Checklist Managing Profitable Construction Business Lectures are based on the indivarious case studies are studied and solved. Online Building Industry Game (BIG) will be played by all course participants through the second structure of the second				
	listic business environment where participants play the role of contractors, competing in a market with variable demand for construct		· ·		
	loped and directly operated by the California Polytechnic State University, students act as contractors, managing both, their compani		inne game,		
1260CS1	Construction Pricing 1	Z,ZK	5		
	-related consumption of work and resources, valued and expressed in monetary units. The aim of the course is to teach the student to u				
-	urthermore, use the normative and data base, and adapt the normative base for new materials and technologies, or creating. Basic p		-		
-	dustry. Organization and standardization of work in the company, production process, time consumption. Standardization of labor co	-			
	s, documents. Standardization of material consumption, examples, documents. Standardization of the need for machines - productivity,	-	-		
documents. Salary	costs - payroll system, job catalog, wage rate calculation. Costs - breakdown of costs, calculation methods and techniques, calculation	bases. Dynamic an	d normative		
method of calculati	on, examples, documents. Individual costing - costing formula, content of components, examples, documents. Methods of non-absor	ption costing (ABC	, method of		
variable costs), exa	mples. Influencing the amount of material costs, wages, machine operation, overhead. Cost modeling, break-even analysis, examples	s. Managerial conce	ept of costs.		
126OCS2	Construction Pricing 2	Z,ZK	7		
Price and its impo	rtance, price factors, price strategies, types of contract, estimating at different stages of project, price setting data. Price creation - o	riented to costs, de	mand and		
competition, met	hod of price creation. Methods of creating the bid price. Labor and equipment rates per hour. IT support for estimating. Engineering a	and design activitie	s pricing.		
1260INS	Pricing of Civil Engineering Works	Z,ZK	4		
Cost database of tra	ansportation structures I normative prices, aggregated items Cost database of transportation structures II OTSKP catalogue Schedul	e of works and bill o	of quantities		
requirements and sources Cost estimation of transportation structures basic principles, techniques Financing of transportation structures EU, SFDI, PPP projects Cost analysis of					
transportation structures real projects and cost categories Engineering constructions from the perspective of contracting authority legal norms and another legislature Engineering					
	he perspective of contractor managing of a contract within the construction company Life cycle costs of engineering constructions Econo		-		
structures Introduct	tion to estimating software for transportation structures Building information modelling (BIM) and estimating requirements, schedule of	of works Internation	nal methods		
	of planning, estimating and predicting transportation structure costs				

	Marketing in construction - project	KZ	3
	ices students to basic concepts and techniques in the field of marketing, the links between marketing and other activities in the constr		
construction com	pany and in society. Students should learn to find market opportunities, segment the market, evaluate market opportunities, build a sir and master promotion methods, master pricing principles, correctly define the product and determine distribution channels		K, I.E. KNOW
126PJOC	Construction Pricing Project	KZ	4
	Irse is to introduce students to the budgeting and cost planning of building structures and construction works. Students will carry out t		-
	ns using the software KROS. The main task of students will be to create a bill of quantities according to the regulation 169/2016 and t		
	database. The students will use the project documentation of real building structures (the estimate budget should be more than 15		
126PJRS	Construction Preparation and Management Project	KZ	5
	oject of construction preparation, planning, technical preparation and simulation of building execution on the basis of individual assign		
126PRS	Construction Planning and Management oject management, project life cycle, engineering, design phase, methods of time scheduling, cost management, procurement system	Z,ZK	5 ontractor
Construction pr	management. Safety, quality and environmental management.		Unitación
126RPRO	Construction Process Management	Z,ZK	3
	jocus on managerial and technical-economic planning during the basic technological processes of construction. The main focus will be		
management and	control of building capacities and mechanization from the point of view of the contractor. Students will be acquainted with the principle	es of practical cost	calculation
	of individual technological processes of construction. Teaching topics will be explained in case studies.		
126RSPR	Construction Project Management	Z,ZK	5
The subject provid	des a basic overview of project management. It defines the life cycle of a construction project. Content of individual phases of the project.	ect life cycle. Prepa	aration and
126SLEG		Z	2
	Building Legislation g and construction code law. Public procurement law. Definition of terms. Commercial contractual relationships. Main contract types in		
	conclusion of a future contract, purchase contract, contract for work, Contents of the contract.		
126SRPB	Facility Management and Operation	Z,ZK	4
	subject is the management and control of the operation of buildings using the support of modern technologies. Familiarization with the		
operation of facility	management using the CAFM system. The focus of the software support will be both on the passportization of basic property data and	l, in particular, on th	ne planning,
	management and evaluation of the most frequently used facility management processes.		
126SWPX	Software for Business Practice	Z	2
	iction practice requires the application of various supporting tools and methods. The course is focused on acquire practical skills in us cially MS Excel). The aim is to improve their existing skills and acquire new ones to save time at work. The main goal is to focus on su	-	
applications (espe	continuing subjects and practice. It includes the verification of knowledge when creating examples in the exercise.		phicaple in
126VEIN	Public Investment Construction	Z,ZK	3
	restment project. Evaluation of revenues and costs, income and expenses in individual phases of the life cycle of the construction proj		
	investment decision-making.		
126YIPD	Small Business	7 71/	4
120111 D	Official Debifieds	Z,ZK	4
126YPER	Human resource management	Z,ZK	2
126YPER	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders	Z,ZK	2
126YPER Main intention is t	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations).	Z,ZK hip and remunerat	2 tion. Within
126YPER	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software	Z,ZK	2
126YPER Main intention is t 126YSWO	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation	Z,ZK ship and remunerat Z,ZK	2 tion. Within 4
126YPER Main intention is t 126YSWO 126YTRO	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation Decision theory	Z,ZK ship and remunerat Z,ZK Z,ZK	2 tion. Within 4 2
126YPER Main intention is t 126YSWO 126YTRO 126ZIPN	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation Decision theory Basics of innovative business	Z,ZK ship and remunerat Z,ZK Z,ZK Z,ZK	2 tion. Within 4 2 2
126YPER Main intention is t 126YSWO 126YTRO 126ZIPN 132PRPE	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation Decision theory Basics of innovative business Strength of Materials	Z,ZK ship and remunerat Z,ZK Z,ZK Z,ZK Z,ZK	2 tion. Within 4 2 2 6
126YPER Main intention is t 126YSWO 126YTRO 126ZIPN 132PRPE Fundamentals of t	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation Decision theory Basics of innovative business	Z,ZK ship and remunerat Z,ZK Z,ZK Z,ZK z,ZK r in bending, critica	2 tion. Within 4 2 2 6 al loads and
126YPER Main intention is t 126YSWO 126YTRO 126ZIPN 132PRPE Fundamentals of t	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation Decision theory Basics of innovative business Strength of Materials he theory of elasticity: stress and strain of straight beams subjected to bending and free torsion, ultimate plastic capacity of a member	Z,ZK ship and remunerat Z,ZK Z,ZK Z,ZK z,ZK r in bending, critica	2 tion. Within 4 2 2 6 al loads and
126YPER Main intention is t 126YSWO 126YTRO 126ZIPN 132PRPE Fundamentals of t buckling leng 132SM01	Human resource management o make students familiar with practical HR management in construction company with focus on hiring, adaptation, motivation, leaders classes theory is combined with trainings (model situations). Construction Estimation Software The teaching is focused on familiarization with cost calculation SW for item preparation Decision theory Basics of innovative business Strength of Materials he theory of elasticity: stress and strain of straight beams subjected to bending and free torsion, ultimate plastic capacity of a member of straight compression members. Basic assumptions, quantities, and equations describing the stress and strain state in 3D contt Structural Mechanics 1 force systems acting on rigid bodies in space/plane, moment of a force about a point and line. Supports of a rigid body, reaction force	Z,ZK ship and remunerat Z,ZK Z,ZK Z,ZK r in bending, critica inuum, plates and Z,ZK	2 tion. Within 4 2 6 al loads and walls. 6
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135GM01	Geomechanics 1	Z	3			
The course focuses	on the understanding of basic geological laws and principles in relation to architecture, civil engineering and urban planning. Empha	isis is placed on ex	plaining the			
influence of geological processes, both endogenous and exogenous, on the rock environment and how the geological situation affects the design of structures and their interaction with						
the rock environment. At the same time, attention is paid to the technical properties of rocks with regard to their practical applications. The course also includes a brief introduction to						
	the regional geology of the Czech Republic.					
135GM2I	Geomechanics 2I	Z,ZK	5			
	ils, basic properties of soils, water in soil, strength and deformation properties of soils and their determination, improvement of soil p	roperties, applicati	on tasks			
135ZSE	Foundations E	Z.ZK	4			
Úvod do p edm	tu, literatura, zásady navrhování, geotechnické kategorie Pevnostní a deforma ní charakteristiky základové p dy, plošné základy Me	zní stavy plošných	základ ,			
	sedání plošných základ Hlubinné základy - typologie, pilotové základy, technologie vrtaných a ražených pilot Osová únosnost osam					
	snosti pín zatížených pilot, skupina pilot Mikropiloty, kotvy, technologie Injektáž klasická a trysková, podzemní st ny Stavební jámy,					
jam Zásady pro náv	rh a posouzení pažicích konstrukcí, zemní tlak, ú inek vody Výpo et pažicích konstrukcí, metody závislých tlak Odvod ování staveb	ních jam Ochrana z	ákladových			
	konstrukcí p ed ú inky agresivního prost edí		-			
136DSUZ	Transport Structures and Urban Planning	Z,ZK	7			
	JZ is composed of 3 issues, which build on each other and complement each other. These are the area of transport structures (roads	and rail transport -	scope 3+1)			
and the area of urb	an planning and spatial planning (scope 2+0). Unlike the road construction and railroad construction sections, the urban planning se	ction does not end	with credit.			
Transport Structure	s - Roads (R): Introduction to basic terminology in the part of roads, history. Road Act and related legislative and technical regulation	s, their impact on r	oad design.			
Design categories	of roads and motorways, design speed, directional and elevation design of routes, cross-sectional layout of roads and motorways, ea	rthwork - dimensic	ns, shapes,			
drainage. Urban	roads, division and marking, definition of MK space, differences in design, operation and equipment. Carriageway, division, design p	rinciples. Safety ec	uipment,			
junctions and cross	ings. Transport Structures - Rail transport (RT): Introduction to basic terminology, Issues of railway crossings from the point of view of	security, design an	d operation.			
Tram transport - his	tory, principles of tram track construction, interaction with the environment. Metro as a system of urban rail transport. Basic principle:	s and parameters,	metro lines.			
Railway constructio	ns - an introduction to the design and construction of a railway track in the conditions of the Czech Republic, the basic elements of the	railway superstruc	ture. Spatial			
	Planning (SP): Teaching spatial planning and urban planning, spatial planning tools and procedures for their acquisition.					
141HYA	Hydraulics	Z,ZK	5			
A course deals with	i issues of hydrostatics and hydrodynamics with aiming at civil engineering applications. There are analysed tasks related to hydrosta	atic and hydrodyna	mic loading			
	of structures, pipeline flow, open channel flow and groundwater flow.					
142VIZP	Water and Environmental Engineering	Z,ZK	4			
During the teaching	g semester, students are introduced to the fields of water engineering, water management and environmental engineering. In particu	lar, emphasis is pla	aced on the			
practical aspects of water and environmental engineering in close relation to other branches of civil engineering. The course is taught in the form of lectures and tutorials. The lectures						
are divided thematically into 20 blocks according to the different branches of the discipline (13 times water engineering and 7 times environmental engineering). In the exercises,						
students work on	basic problems in the field of hydrology, water supply and water structures, especially dams, hydropower and flood issues. All 4 "wat	er" departments of	K14x are			
	involved in teaching the course.					
154SG01	Land Surveying in Civil Engineering	Z,ZK	6			
The shape and size	ze of the Earth, substitutive surfaces, cartographic projections Horizontal and vertical control, coordinate calculations Quality control,	deviations and tol	erations in			
build-up Angle and	d distance measurements Heighting measurements Other geodetic methods in build-up (GNSS, DPZ,) Photogrammetry and laser	scanning Themati	c mapping			
and present state documentation Geodetic works in build-up State map series of CR and thematic maps for build-up Geographic information systems and spatial planning Cadastre						
of real estates Laws and decrees for geodesy and build-up in Czech Republic						
TV1	Physical Education	Z	0			
TV2	Physical Education	Z	0			

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