Study plan

Name of study plan: Stavební inženýrství - ízení projekt

Faculty/Institute/Others: Department: Branch of study guaranteed by the department: Welcome page Garantor of the study branch: Program of study: Civil Engineering - Project Management Type of study: Follow-up master full-time Required credits: 90 Elective courses credits: 0 Sum of credits in the plan: 90 Note on the plan: platí pro nástup od akad. roku 2024/25

Name of the block: Compulsory courses Minimal number of credits of the block: 82 The role of the block: Z

Code of the group: NP20230100 Name of the group: Stavební inženýrství - ízení projekt , 1. 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 aroup:

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
126INZG	Engineering Dana M š anová, Václav Tatýrek Václav Tatýrek Dana M š anová (Gar.)	Z,ZK	5	2P+2C	Z,L	Z
126OCS1	Construction Pricing 1 Iveta St elcová, Lucie Brožová, Stanislav Vitásek Lucie Brožová Lucie Brožová (Gar.)	Z,ZK	5	2P+2C	Z	Z
126PM1	Project Management 1 Michal Vondruška Michal Vondruška (Gar.)	Z,ZK	5	3P+1C	Z	Z
126MSFP	Managament in Construction Company Martin ásenský Martin ásenský Eduard Hromada (Gar.)	Z,ZK	7	3P+2C	Z	Z
126SLEG	Building Legislation Dana M š anová Dana M š anová Dana M š anová (Gar.)	Z	2	2P	Z	Z
126PRRS	Construction Planning and Operations Management Lucie Brožová, Jaroslava Tománková Lucie Brožová Lucie Brožová (Gar.)	Z,ZK	6	2P+3C	Z	Z

Characteristics of the courses of this group of Study Plan: Code=NP20230100 Name=Stavební inženýrství - ízení projekt . 1. semestr

126INZG Engineering Z,ZK 5 Conceptual and operational management of development projects from perspective of time, resources, cost, analysis of resources, solution design, external examination, investment opportunities study, feasibility study, interest optimization, technological, legal, financial resources, price determination, commercial contractual law, engineering contracts specimens, VOB (Verdingungsordnung für Bauleistungen) delivery conditions used by german investors - FIDIC contractual terms used in international construction practice, contractual determination of performance and quality parameters, contractual sanctions, time realistic plans, territorial, constructional governance, law no. 183/2006 Sb. fulfilment, construction order assignment, investment engineering, supplier engineering, suppliers coordination, financial management, capacity management, guality control, technological regulations, handover proceedings plan, test run operation, parameters fulfilment assessment, construction maintenance planning, marketing, building changes prior completion, building handover and acceptance, handover documentation, performance audit, decision processes and methods, invested energy. BIM. Documentation rules. Insolvency, Social responsibility in construction firms, RIPRAN method.

1260CS1 **Construction Pricing 1**

Costs are operation-related consumption of work and resources, valued and expressed in monetary units. The aim of the course is to teach the student to use basic calculation techniques and procedures. Furthermore, use the normative and data base, and adapt the normative base for new materials and technologies, or creating, Basic principles of cost calculation in the construction industry. Organization and standardization of work in the company, production process, time consumption. Standardization of labor consumption, methods of setting standards, examples, documents. Standardization of material consumption, examples, documents. Standardization of the need for machines - productivity, capacity standards, examples, documents. Salary costs - payroll system, job catalog, wage rate calculation. Costs - breakdown of costs, calculation methods and techniques, calculation bases. Dynamic and normative method of calculation, examples, documents. Individual costing - costing formula, content of components, examples, documents. Methods of non-absorption costing (ABC, method of variable costs), examples. Influencing the amount of material costs, wages, machine operation, overhead. Cost modeling, break-even analysis, examples. Managerial concept of costs.

Z,ZK

5

126PM1	Project Management 1	Z,ZK	5		
The subject is focused of	n important decision-making processes and management processes in the preparation and implementation of construction	from the perspec	tive of the owner		
of the construction proje	ect. The goal is to analyze the appropriateness of developer acquisition, project activity, legislative preparation, permitting pro	cesses, choice of	supplier system,		
choice of supplier evalu	ation method, choice of contract form. The main attention will be paid to the comparison of the traditional construction deliver	ry method (Desig	n Bid Build) with		
current alternative deliv	ery systems (Design Build, Integrated Project Delivery, Construction Management). The teaching is supplemented by a numl	ber of case studie	S.		
126MSFP	Managament in Construction Company	Z,ZK	7		
The course provides a g	eneral overview of the problems of a business in the construction industry . The student is familiar and works actively with cor	ncepts strategy, s	trategic analysis		
, management - top , m	iddle and operational; planning at all levels and implementation plans , organizational structure , management levels in the $lpha$	ompany , controlli	ng, human		
resources management	, marketing, process and project management, risk management in the company.				
126SLEG	Building Legislation	Z	2		
Territorial planning and	construction code law. Public procurement law. Definition of terms. Commercial contractual relationships. Main contract types	s in construction -	contract of the		
conclusion of a future c	ontract, purchase contract, contract for work, Contents of the contract.				
126PRRS	Construction Planning and Operations Management	Z,ZK	6		
Construction project management, project life cycle, engineering, design phase, methods of time scheduling, cost management, procurement systems and contracts, contractor					
management. Safety, quality and environmental management,					

Code of the group: NP20230200

Name of the group: Stavební inženýrství - ízení projekt , 2. semestr Requirement credits in the group: In this group you have to gain at least 22 credits Requirement courses in the group: In this group you have to complete at least 5 courses Credits in the group: 22 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.) BIM - Information modeling Josef Žák, Robert Bouška Josef Žák Josef Žák (Gar.) 126BIMP Z,ZK 5 2P+3C L Ζ **Construction Pricing 2** 1260S2P Z.ZK 4 2P+2C L 7 lveta St elcová, Renáta Schneiderová Heralová Renáta Schneiderová Heralová Renáta Schneiderová Heralová (Gar.) **Project Management 2** 126PM2 Z,ZK 5 3P+1C L 7 Michal Vondruška Michal Vondruška Michal Vondruška (Gar.) **Facility Management** 126FAMG Z,ZK 4 1P+3C L Z Daniel Macek Daniel Macek Daniel Macek (Gar.) **Diploma Seminar** Dana M š anová, Václav Tatýrek, Iveta St elcová, Lucie Brožová, Stanislav 126DSP ΚZ 4 3C L Ζ Vitásek, Dana ápová, Michal Vondruška, Martin ásenský, Eduard Hromada, Renáta Schneiderová Heralová Renáta Schneiderová Heralová (Gar.)

Characteristics of the courses of this group of Study Plan: Code=NP20230200 Name=Stavební inženýrství - ízení projekt , 2. semestr

126BIMP	BIM - Information modeling	Z,ZK	5			
126OS2P	Construction Pricing 2	Z,ZK	4			
Price and its importance	e, 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.			
126PM2	Project Management 2	Z,ZK	5			
The teaching of the sub	ect Project management 2 is focused on the acquisition of project management methods in the implementation of large-scal	le technological c	onstructions and			
constructions of transpo	ort infrastructure. The curriculum is based on the classical theory of project management according to the PMBOK (Project M	lanagement Body	of Knowledge)			
and its application to the	e construction project management manuals of major construction companies (Best Practice). Detailed attention is paid to th	e main processes	s of project			
management (scope, til	ne, cost, quality, human resources, risk and procurement management). The procedural management of construction project	ts is supplemente	d by the current			
issue of claims manage	ment and crisis management of construction projects.					
126FAMG	Facility Management	Z,ZK	4			
The aim of the course is	s to understand the issue of integrated facility management in the context of the currently valid standards SN EN 15221 and	SN EN ISO 41	001 - Facility			
management. Students	will become familiar with the principles of efficient building operation, including the provision of support activities in the form	of in-house and o	utsourcing. As			
part of the life cycle of b	puildings, they solve the issue of operating costs, including maintenance and renewal planning, where they use the Buildpass	application. Stud	lents will learn to			
work with the ARCHIBL	IS CAFM system, from linking the BIM model from the Revit application to solving practical tasks in building management an	d operation.				
126DSP	Diploma Seminar	KZ	4			
The project addresses problems mainly from building practice. The project is preparation for own diploma thesis. The output of the project is the assignment of the topic of the diploma						
thesis, elaboration of the curriculum, search and study of literature, research and detailed introduction to the solved problems. The student will study the methodological instructions						
of the Czech Technical	of the Czech Technical University in Prague, how to write university graduate theses - see http://knihovna.cvut.cz/en/seminare-a-vyuka/jak-psat/jak-psat-zaverecnou-praci.					

Code of the group: NP20230300

Name of the group: Stavební inženýrství - ízení projekt, diplomová práce 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 1 course 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
126DPM	Diploma Thesis Dana M š anová, Václav Tatýrek, Iveta St elcová, Lucie Brožová, Stanislav Vitásek, Dana ápová, Michal Vondruška, Martin ásenský, Eduard Hromada, Eduard Hromada Václav Tatýrek (Gar.)	Z	30	24C	Z	Z

Characteristics of the courses of this group of Study Plan: Code=NP20230300 Name=Stavební inženýrství - ízení projekt , diplomová

prace					
126DPM	Diploma Thesis	Z	30		
In his/her diploma thesis a student deals with topics from civil engineering and construction, economic and management. He/she solves problems both from operational practice and					
from research and development. A thesis contains a text part, drawings and possibly documentation. In the project conclusion a student will highlight his/her own contribution to the					
assigned topic. A thesis links to diploma project and augments knowledge gained of it. The student continuously consults the work with the supervisor, when he submits the individual					
parts in progress.					

Name of the block: Compulsory elective courses Minimal number of credits of the block: 8 The role of the block: PV

Code of the group: NP20240200_1

Name of the group: Stavební inženýrství - ízení projekt , PV p edm ty, 2. semestr Requirement credits in the group: In this group you have to gain at least 8 credits Requirement courses in the group: In this group you have to complete at least 2 courses Credits in the group: 8

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
126YCOC	Construction Contracting Aleš Tomek, Radan Tomek Josef Žák	Z,ZK	2	2P	L	PV
126YEMB	Energy Management Jan Pojar, Ji í Karásek Ji í Karásek Ji í Karásek (Gar.)	Z,ZK	4	2P+2C	L	PV
126YMCP	Management in Construction Company Aleš Tomek, Radan Tomek Vladimíra Nováková	Z,ZK	4	2P+2C	L	PV
126YOINS	Pricing of Civil Engineering Works Iveta St elcová, Stanislav Vitásek Iveta St elcová Iveta St elcová (Gar.)	Z,ZK	4	2P+2C	L	PV
126ZINP	Small Business Jana Frková, Olga Heralová Olga Heralová Jana Frková (Gar.)	Z,ZK	4	2P+2C	L	PV
126YMMR	Management Decision-making Methods Eduard Hromada Eduard Hromada Eduard Hromada (Gar.)	Z,ZK	2	1P+1C	L	PV
126YVEI	Public Investment Construction Renáta Schneiderová Heralová, Zita Prost jovská Zita Prost jovská Renáta Schneiderová Heralová (Gar.)	Z,ZK	2	2P	L	PV
126IMBP	Building Information Management (BIM) Robert Bouška	Z,ZK	4	1P+3C	L	PV
126YPMP	Marketing in the Construction Industry - Project P Kate ina Eklová Kate ina Eklová	KZ	2	2C	L	PV
126ZIPN	Basics of innovative business Dana M š anová Dana M š anová Dana M š anová (Gar.)	Z,ZK	2	1P+1C	L	PV
126YPER	Human resource management Eduard Hromada, Olga Heralová Michal Vondruška Michal Vondruška (Gar.)	Z,ZK	2	1P+1C	L	PV
126YBVP	BIM in Public Investments Renáta Schneiderová Heralová	ZK	2	2P	L	PV

Characteristics of the courses of this group of Study Plan: Code=NP20240200_1 Name=Stavební inženýrství - ízení projekt , PV p edm tv. 2. semestr

<u>p</u>						
126YCOC	Construction Contracting	Z,ZK	2			
As every project manag	As every project manager in construction business has to be a contract manager at the same time, understanding the contract - respectively contracting in general - is a must.					
of Construction Contrac	ting is oriented on current business practices and methods, management techniques and understanding general legal princi	ples, codes and re	egulations. It is			
about doing business in	construction using standard procurement systems and applying given types of contracts, respectively standard contracts (e.	.g. FIDIC). Lecture	es are based on			
the real practice experie	ence of both course's lecturers and various case studies are studied and solved.					
126YEMB	Energy Management	Z,ZK	4			
The course on energy n	nanagement covers the issues of management in general, energy management, energy systems, and energy efficiency in the	e European legisl	ation framework.			
The main target of the o	course is to explain basic principles and future changes in the construction industry, specifically in the field of energy efficience	y economics. The	students will			
increase their knowledg	increase their knowledge about strategies towards sustainable energy in buildings and mainly about energy efficiency. A specific part of the course is dedicated to the evaluation of					
energy efficiency measures, supporting schemes for energy efficiency, tackling energy poverty, multi-criterial evaluation of projects, LCA (live cycle assessment) and LCC (life cycle						
cost), moreover the students receive overview of the cost optimum calculation.						
126YMCP	Management in Construction Company	Z,ZK	4			

126YOINS	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 sourc	es Cost estimation of transportation structures basic principles, techniques Financing of transportation structures EU, SFDI,	PPP projects Cos	t analysis of			
transportation structures	s real projects and cost categories Engineering constructions from the perspective of contracting authority legal norms (FIDIC) a	and another legisla	ure Engineering			
constructions from the p	erspective of contractor managing of a contract within the construction company Life cycle costs of engineering constructions E	conomic efficiency	of transportation			
structures Introduction t	o estimating software for transportation structures Building information modelling (BIM) and estimating requirements, sched	ule of works Intern	ational methods			
of planning, estimating a	and predicting transportation structure costs					
126ZINP	Small Business	Z,ZK	4			
126YMMR	Management Decision-making Methods	Z,ZK	2			
126YVEI	Public Investment Construction	Z,ZK	2			
Public sector investmen	t project. Evaluation of revenues and costs, income and expenses in individual phases of the life cycle of the construction pr	oject. Risk and un	certainty in			
investment decision-ma	king.					
126IMBP	Building Information Management (BIM)	Z,ZK	4			
The course deals with E	uilding Information Modeling (BIM) as a modern tool for the design, construction and operation of construction projects. It for	cuses on advance	d applications of			
information technology i	n construction and design companies. Software tools that are used for quality control, measurement, preparation of bills of qu	antities, simulation	n of construction			
progress, robotics in civ	il and transportation construction, and cybercrime, its risks and measures in construction projects. The subject content inclu	des information or	contracting			
digitisation on construct	ion projects.					
126YPMP	Marketing in the Construction Industry - Project P	KZ	2			
The course introduces s	students to basic concepts and techniques in the field of marketing, the links between marketing and other activities in the co	onstruction compa	ny, its role in the			
construction company a	nd in society. Students should learn to find market opportunities, segment the market, evaluate market opportunities, build a	a simple marketing	mix, i.e. know			
and master promotion n	nethods, master pricing principles, correctly define the product and determine distribution channels.					
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).						
126YBVP	BIM in Public Investments	ZK	2			

List of courses of this pass:

Code	Name of the course	Completion	Credits				
126BIMP	BIM - Information modeling	Z,ZK	5				
126DPM	Diploma Thesis	Z	30				
In his/her diploma	In his/her diploma thesis a student deals with topics from civil engineering and construction, economic and management. He/she solves problems both from operational practice and						
	I development. A thesis contains a text part, drawings and possibly documentation. In the project conclusion a student will highlight h						
assigned topic. A th	esis links to diploma project and augments knowledge gained of it. The student continuously consults the work with the supervisor, v parts in progress.	vhen he submits th	ie individual				
126DSP	Diploma Seminar	KZ	4				
The project addres	ses problems mainly from building practice. The project is preparation for own diploma thesis. The output of the project is the assignment	nent of the topic of	the diploma				
thesis, elaboration	of the curriculum, search and study of literature, research and detailed introduction to the solved problems. The student will study th	e methodological i	nstructions				
of the Czech	Technical University in Prague, how to write university graduate theses - see http://knihovna.cvut.cz/en/seminare-a-vyuka/jak-psat/jal	k-psat-zaverecnou	-praci.				
126FAMG	Facility Management	Z,ZK	4				
	urse is to understand the issue of integrated facility management in the context of the currently valid standards SN EN 15221 and						
-	dents will become familiar with the principles of efficient building operation, including the provision of support activities in the form of		-				
	of buildings, they solve the issue of operating costs, including maintenance and renewal planning, where they use the Buildpass ap						
	h the ARCHIBUS CAFM system, from linking the BIM model from the Revit application to solving practical tasks in building managen		l.				
126IMBP	Building Information Management (BIM)	Z,ZK	4				
	ith Building Information Modeling (BIM) as a modern tool for the design, construction and operation of construction projects. It focuse		-				
	ogy in construction and design companies. Software tools that are used for quality control, measurement, preparation of bills of quanti						
progress, robotic:	s in civil and transportation construction, and cybercrime, its risks and measures in construction projects. The subject content include	s information on c	ontracting				
	digitisation on construction projects.						
126INZG	Engineering	Z,ZK	5				
	erational management of development projects from perspective of time, resources, cost, analysis of resources, solution design, extra contract of the second se						
	, feasibility study, interest optimization, technological, legal, financial resources, price determination, commercial contractual law, eng						
	rdnung für Bauleistungen) delivery conditions used by german investors - FIDIC contractual terms used in international construction prac						
	quality parameters, contractual sanctions, time realistic plans, territorial, constructional governance, law no. 183/2006 Sb. fulfilment, c ering, supplier engineering, suppliers coordination, financial management, capacity management, quality control, technological regul		•				
-	ration, parameters fulfilment assessment, construction maintenance planning, marketing, building changes prior completion, building		-				
	entation, performance audit, decision processes and methods, invested energy. BIM. Documentation rules. Insolvency, Social respon						
	RIPRAN method.						
126MSFP	Managament in Construction Company	Z,ZK	7				
The course provide	s a general overview of the problems of a business in the construction industry . The student is familiar and works actively with concer	ots strategy , strate	gic analysis				
, management -	top, middle and operational; planning at all levels and implementation plans, organizational structure, management levels in the co	mpany, controlling	g, human				
	resources management, marketing, process and project management, risk management in the company.						
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 student to us	se basic calculation	techniques				
and procedures. Furthermore, use the normative and data base, and adapt the normative base for new materials and technologies, or creating. Basic principles of cost calculation in							
the construction in	dustry. Organization and standardization of work in the company, production process, time consumption. Standardization of labor cor	sumption, method	Is of setting				

documents. Salary	s, documents. Standardization of material consumption, examples, documents. Standardization of the need for machines - productivity, costs - payroll system, job catalog, wage rate calculation. Costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the need for machines - productivity, costs - breakdown of costs, calculation methods and techniques, calculation to the standardization of the standard	bases. Dynamic an	d normative	
	on, examples, documents. Individual costing - costing formula, content of components, examples, documents. Methods of non-absorp			
	mples. Influencing the amount of material costs, wages, machine operation, overhead. Cost modeling, break-even analysis, examples			
126OS2P	Construction Pricing 2	Z,ZK	4	
	rtance, price factors, price strategies, types of contract, estimating at different stages of project, price setting data. Price creation - or hod of price creation. Methods of creating the bid price. Labor and equipment rates per hour. IT support for estimating. Engineering a			
126PM1	Project Management 1	Z,ZK	5	
-	sed on important decision-making processes and management processes in the preparation and implementation of construction fron project. The goal is to analyze the appropriateness of developer acquisition, project activity, legislative preparation, permitting process			
	evaluation method, choice of contract form. The main attention will be paid to the comparison of the traditional construction delivery m			
	native delivery systems (Design Build, Integrated Project Delivery, Construction Management). The teaching is supplemented by a n			
126PM2	Project Management 2	Z,ZK	5	
	subject Project management 2 is focused on the acquisition of project management methods in the implementation of large-scale te	,		
•	insport infrastructure. The curriculum is based on the classical theory of project management according to the PMBOK (Project Mana	•		
and its application	on to the construction project management manuals of major construction companies (Best Practice). Detailed attention is paid to the	main processes c	of project	
management (scor	e, time, cost, quality, human resources, risk and procurement management). The procedural management of construction projects is	supplemented by	the current	
	issue of claims management and crisis management of construction projects.			
126PRRS	Construction Planning and Operations Management	Z,ZK	6	
Construction pro	ject management, project life cycle, engineering, design phase, methods of time scheduling, cost management, procurement system		ontractor	
	management. Safety, quality and environmental management,			
126SLEG	Building Legislation	Z	2	
Territorial planning	and construction code law. Public procurement law. Definition of terms. Commercial contractual relationships. Main contract types in	construction - con	tract of the	
	conclusion of a future contract, purchase contract, contract for work, Contents of the contract.			
126YBVP	BIM in Public Investments	ZK	2	
126YCOC	Construction Contracting	Z,ZK	2	
As every project ma	anager in construction business has to be a contract manager at the same time, understanding the contract - respectively contracting	in general - is a m	ust. Course	
of Construction Co	intracting is oriented on current business practices and methods, management techniques and understanding general legal principle	s, codes and regul	ations. It is	
about doing busine	ss in construction using standard procurement systems and applying given types of contracts, respectively standard contracts (e.g. F	FIDIC). Lectures ar	e based on	
	the real practice experience of both course's lecturers and various case studies are studied and solved.			
126YEMB	Energy Management	Z,ZK	4	
The course on energy	gy management covers the issues of management in general, energy management, energy systems, and energy efficiency in the Eu	ropean legislation	framework.	
-	f the course is to explain basic principles and future changes in the construction industry, specifically in the field of energy efficiency			
	wledge about strategies towards sustainable energy in buildings and mainly about energy efficiency. A specific part of the course is d			
energy efficiency i	neasures, supporting schemes for energy efficiency, tackling energy poverty, multi-criterial evaluation of projects, LCA (live cycle ass	essment) and LCC	(life cycle	
400)(1400	cost), moreover the students receive overview of the cost optimum calculation.	7 71/		
126YMCP	Management in Construction Company	Z,ZK	4	
126YMMR	Management Decision-making Methods	Z,ZK	2	
126YOINS	Pricing of Civil Engineering Works	Z,ZK	4	
	ansportation structures I normative prices, aggregated items Cost database of transportation structures II OTSKP catalogue Schedule			
	sources Cost estimation of transportation structures basic principles, techniques Financing of transportation structures EU, SFDI, P		, ,	
	tures real projects and cost categories Engineering constructions from the perspective of contracting authority legal norms (FIDIC) and a	-		
	he perspective of contractor managing of a contract within the construction company Life cycle costs of engineering constructions Econo	,	•	
structures introduct	ion to estimating software for transportation structures Building information modelling (BIM) and estimating requirements, schedule o of planning, estimating and predicting transportation structure costs	of works internation	nai methods	
		7.71	2	
126YPER	Human resource management Human resource management	Z,ZK	2	
Main Intention Is to	classes theory is combined with trainings (model situations).	mp and remunerat	ION. WITHIN	
	Marketing in the Construction Industry - Project P	K2	2	
126YPMP	ces students to basic concepts and techniques in the field of marketing, the links between marketing and other activities in the constr	KZ	2 s rolo in the	
	any and in society. Students should learn to find market opportunities, segment the market, evaluate market opportunities, build a sir			
concaración comp	and master promotion methods, master pricing principles, correctly define the product and determine distribution channels		,	
126YVEI	Public Investment Construction	Z,ZK	2	
	estment project. Evaluation of revenues and costs, income and expenses in individual phases of the life cycle of the construction proj			
investment decision-making.				
126ZINP	Small Business	Z,ZK	4	
126ZIPN	Basics of innovative business	Z,ZK	2	
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For updated information see <u>http://bilakniha.cvut.cz/en/FF.html</u> Generated: day 2025-07-20, time 19:56.