Study plan

Name of study plan: Innovation Project Management od 2019/20

Faculty/Institute/Others: Department: Branch of study guaranteed by the department: Welcome page Garantor of the study branch: Program of study: Innovation Project Management Type of study: Follow-up master full-time Required credits: 36 Elective courses credits: 84 Sum of credits in the plan: 120 Note on the plan:

Name of the block: Compulsory courses Minimal number of credits of the block: 30 The role of the block: Z

Code of the group: N0413A -POV-2SEM Name of the group: Povinné p edm ty - Innovation Project Management 1ro ník 2.semestr Requirement credits in the group:

Requirement courses in the group: In this group you have to complete 4 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
G63E2302	Controlling	Z,ZK	6	2P+2C		Z
G16E2501	HR Management Systems	Z,ZK	6	2P+2C		Z
G77E2011	Industry 4.0	ZK	3	2P+0C		Z
G63E2201	Microeconomic Theory	ZK	3	2P+0C		Z

Characteristics of the courses of this group of Study Plan: Code=N0413A -POV-2SEM Name=Povinné p edm ty - Innovation Project Management 1ro ník 2.semestr

G63E2302	Controlling	Z,ZK	6				
The aim of the course is	The aim of the course is to explain the substance of controller's work - application of management control systems into business corporation (incl. tools like cost allocations, budgeting						
standard costing, cost a	ccounting and balanced scorecard).						
G16E2501	HR Management Systems	Z,ZK	6				
The course is focused o	n the development of managerial skills in managing human resources in the organization. Through lectures and seminars, stud	, dents will learn eff	ective strategies,				
policies, and practices f	or efficient human resource management in the organization and the main tasks of managers in various activities of human	resource manage	ment in the				
organization.							
G77E2011	Industry 4.0	ZK	3				
1. Visions of Industry 4.	0 2. Virtualization and System Integration of Manufacturing Facilities 3. Knowledge representation of Manufacturing Systems	by Multi-Agent ar	nd Autonomous				
Systems 4. Ontological	Knowledge 5. Analytical Methods and Big-Data Systems 6. Implementation Architectures for Industry 4.0 Systems 7. Modelli	ing Methods 8. Si	mulations for				
Design and Rump-up of Industry 4.0 Systems 9. Modular SCADA Systems 10. Virtual and Augmented Reality Systems 11. Typical Projects of Industry 4.0 12. Typical of Industry 4.0							
13. Testbeds and Their Implementation 14. Impacts of Industry 4.0							
G63E2201	Microeconomic Theory	ZK	3				
The course introduces the analysis of the theory of consumer, the theory of firm, and the market interactions of consumers and firms.							

Code of the group: 1.S.IPM OD 19/20

Name of the group: 1. semestr Innovation Project Management nástup 2019/20 Requirement credits in the group: In this group you have to gain 30 credits Requirement courses in the group: In this group you have to complete 5 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
G63E1301	Corporate Financial Management	Z,ZK	6	2P+2C		Z
G16E1302	Lean Manufacturing	Z,ZK	6	2P+2C		Z
G16E1401	Marketing Innovations	Z,ZK	6	2P+2C	Z	Z
G16E1201	Standards of Project Management	Z,ZK	6	2P+2C		Z
G63E1102	Statistical Analysis	Z,ZK	6	2P+2C		Z

Characteristics of the courses of this group of Study Plan: Code=1.S.IPM OD 19/20 Name=1. semestr Innovation Project Management nástup 2019/20

G63E1301	Corporate Financial Management	Z,ZK	6			
Analysis of financial techniques of corporations and firms when facing the financial markets. The portfolio analysis and the implications for the Corporative Management Modelling the						
parameters and alterna	tives for valuating the company. Applied tools for understanding the credit operations on the market. Elaboration of amortizati	on tables. The cou	irse is organized			
2 lectures (mean 90 mi	nutes) weekly, 2 seminars (90 minutes) weekly. 6 credits. Z zápo et, ZK zkouška (preliminary test and exam). This is compos	ed by a theoretica	I instruction and			
a practical development	t. Heavily supported by Excel functions and formulas.					
G16E1302	Lean Manufacturing	Z,ZK	6			
As a result of completing	g this course, the student should be able to: Describe and explain the main significance, meaning, and functions of innovatio	n management w	ith a focus on			
Lean production applica	ations in the workplace. Explain the relationship between management, innovation management, and the main departments	of the company. C	haracterize			
pre-production, product	ion, and manufacturing processes and related Lean manufacturing innovation processes. Create an innovation strategy and	an innovation proj	ect with a focus			
on Lean. Clarify the imp	portance of joint planning/forecasting of upcoming Lean products, services, and production technologies in the company. Etc.					
G16E1401	Marketing Innovations	Z,ZK	6			
The primary role of inno	vation in marketing is to gain new customers, improve goodwill, increase sales and profitability of the company. At the begin	ning of the innova	tion process,			
innovative marketing sh	ould help identify new market opportunities and risks and improve the research of customer needs. During developing a new	product, innovati	on marketing is			
to ensure the constant	nvolvement of customers and users in this process. And at the end of the innovation process, innovation marketing ensures I	he successful intr	oduction of a			
new product, technolog	y, and service to the target audience. Innovation marketing should therefore be present at all stages of the innovation proces	s to ensure that c	ustomer and			
market orientation is in	line with advances in products and technologies, which often lead to the application of new marketing approaches. We addre	ss these main as	pects in this			
subject.						
G16E1201	Standards of Project Management	Z,ZK	6			
The subject acquaints students with good experience in the field of standards of project management After completing the course, students will be prepared to pass the international						
professional examinations.						
G63E1102	Statistical Analysis	Z,ZK	6			
Introduction to intermediate statistical methods. The course follows up on introductory statistic. Knowledge of basic statistical and probabilistic concepts is therefore expected.						

Name of the block: Compulsory elective courses Minimal number of credits of the block: 6 The role of the block: PV

Code of the group: N0413A -VOL-2SEM

Name of the group: Volitelné p edm ty - Innovation Project Management 1ro ník 2.semestr Requirement credits in the group: In this group you have to gain at least 6 credits (at most 12) Requirement courses in the group: In this group you have to complete at least 1 course (at most 2) Credits in the group: 6

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
G16E2302	Business Process Management	Z,ZK	6	2P+2C		PV
G63E2301	Financial Markets and Risk Management	Z,ZK	6	2P+2C	L	PV
G16E2303	Supply Chain and Logistics Execution: Sourcing and Customer Services	Z,ZK	6	2P+2C		PV
G16E2304	Supply Chain and Logistics Execution: Transportation and Warehousing	Z,ZK	6	2P+2C		PV

Characteristics of the courses of this group of Study Plan: Code=N0413A -VOL-2SEM Name=VoliteIné p edm ty - Innovation Project Management 1ro ník 2.semestr

G16E2302	Business Process Management	Z,ZK	6
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G63E2301	Financial Markets and Risk Management	Z,ZK	6			
The analysis of the mar	The analysis of the management of financial risk recently tends towards strategies for hedging the portfolio, and for designing an investment strategy based on diversification. The					
course spans broad sec	tions implementing the principles of variable income and fixed income. The Financial Models evolved rapidly from the inceptior	n of the Modern Th	eory of Portfolio.			
The original Mean - Var	iance analysis, the CAPM, The Black-Litterman model, the disruptive framework implicit in the Black Scholes model for pricir	ng options and the	e Bob Merton's			
contribution, all of them	represent theoretical breakthroughs in the field of finance. When tackling this study, solid statistical basis and advanced skills	in Excel are requi	red. The analysis			
of risk relies on Many of	the models based on important benchmarks rooted in Mertons options theoretic approach and explains default in structural	terms related to	he market value			
of the firms assets as c	ompared to its debt obligations. Other model statistically decomposes observed risky debt prices into default risk premiums.	The set of models	pretends to			
measure the credit risk	of a loan or a portfolio of loans. In this vein, the curse pursuits to simplify the technical details and analytics surrounding thes	e models, while c	oncentrating on			
their underlying econon	nics and economic intuition. They learn to use market instruments and market analyses to design efficient investment and he	dging strategies a	and methods for			
the company capital ma	nagement hurled to financial markets.					
G16E2303	Supply Chain and Logistics Execution: Sourcing and Customer Services	Z,ZK	6			
We will cover 13 topics and explore the fascinating job of modern buyers: creating and implementing strategies, dealing with suppliers and internal customers, solving unexpected						
problems, managing projects, resolving conflicts and negotiating.						
G16E2304	Supply Chain and Logistics Execution: Transportation and Warehousing	Z,ZK	6			

List of courses of this pass:

Code	Name of the course	Completion	Credits		
G16E1201	Standards of Project Management	Z,ZK	6		
The subject acqua	ints students with good experience in the field of standards of project management After completing the course, students will be prej	ared to pass the i	nternational		
	professional examinations.				
G16E1302	Lean Manufacturing	Z,ZK	6		
As a result of com	pleting this course, the student should be able to: Describe and explain the main significance, meaning, and functions of innovation	management with	a focus on		
Lean production	applications in the workplace. Explain the relationship between management, innovation management, and the main departments o	f the company. Cha	aracterize		
pre-production, pro	duction, and manufacturing processes and related Lean manufacturing innovation processes. Create an innovation strategy and an	innovation project	with a focus		
or	Lean. Clarify the importance of joint planning/forecasting of upcoming Lean products, services, and production technologies in the	company. Etc.			
G16E1401	Marketing Innovations	Z,ZK	6		
The primary role	of innovation in marketing is to gain new customers, improve goodwill, increase sales and profitability of the company. At the beginni	ng of the innovatio	n process,		
innovative marketir	ng should help identify new market opportunities and risks and improve the research of customer needs. During developing a new pr	oduct, innovation r	narketing is		
to ensure the con	stant involvement of customers and users in this process. And at the end of the innovation process, innovation marketing ensures th	e successful introd	uction of a		
new product, tech	nnology, and service to the target audience. Innovation marketing should therefore be present at all stages of the innovation process	to ensure that cust	tomer and		
market orientatio	n is in line with advances in products and technologies, which often lead to the application of new marketing approaches. We addres	s these main aspe	cts in this		
	subject.				
G16E2302	Business Process Management	Z.ZK	6		
G16E2303	Supply Chain and Logistics Execution: Sourcing and Customer Services	7.7K	6		
We will cover 13	Display of modern buyers: creating and implementing strategies, dealing with suppliers and internal cu	stomers solving u	nexpected		
	problems, managing projects, resolving conflicts and negotiating.	storrioto, corring di	ionpoolou		
G16E2304	Supply Chain and Logistics Execution: Transportation and Warehousing	7 7K	6		
C16E2504	Up Noncompet Systems		6		
	In Midia development of monogenial skills in monoging human sequences in the preprintion. Through lectures and seminare students	∣ ∠,∠n ko will loorn offoctiv	0 o stratogios		
	ed on the development of manageman is an interlaying number is solved in the organization. Through rectures and seminaris, student		e strategies,		
policies, and pra	cross for encient numan resource management in the organization and the main tasks of managers in various activities of numan re-	source managem	ent in the		
00054400		7 71/	0		
G03E1102	Statistical and the second statistical second statistical and analysis	Z, ZR	O		
	Intermediate statistical methods. The course follows up on introductory statistic. Knowledge of basic statistical and probabilistic cond		cpected.		
G63E1301	Corporate Financial Management	Ζ,ΖΚ	6		
Analysis of financia	It techniques of corporations and firms when facing the financial markets. The portfolio analysis and the implications for the Corporation	ve Management M			
parameters and alte	ernatives for valuating the company. Applied tools for understanding the creat operations on the market, Elaboration of amortization i	ables. The course	is organized		
2 lectures (mean 9	Uminutes) weekiy, 2 seminars (90 minutes) weekiy, 6 creatis. 2 zapo et, 2K zkouska (preliminary test and exam). This is composed	by a theoretical ins	truction and		
00050004	a practical development, neavily supported by Excel functions and formulas.	71/	•		
G63E2201	Microeconomic Theory	ZK	3		
	The course introduces the analysis of the theory of consumer, the theory of tirm, and the market interactions of consumers and	firms.	1		
G63E2301	Financial Markets and Risk Management	Z,ZK	6		
The analysis of the	ne management of financial risk recently tends towards strategies for hedging the portfolio, and for designing an investment strategy	pased on diversific	ation. The		
course spans broad	sections implementing the principles of variable income and fixed income. The Financial Models evolved rapidly from the inception of	the Modern Theory	of Portfolio.		
The original Mean	- Variance analysis, the CAPM, The Black-Litterman model, the disruptive framework implicit in the Black Scholes model for pricing	options and the Bo	b Merton's		
contribution, all of the	hem represent theoretical breakthroughs in the field of finance. When tackling this study, solid statistical basis and advanced skills in E	xcel are required.	The analysis		
of risk relies on Ma	ny of the models based on important benchmarks rooted in Mertons options theoretic approach and explains default in structural ter	ms related to the n	narket value		
of the firms asset	ts as compared to its debt obligations. Other model statistically decomposes observed risky debt prices into default risk premiums. T	he set of models pi	retends to		
measure the credit	risk of a loan or a portfolio of loans. In this vein, the curse pursuits to simplify the technical details and analytics surrounding these r	noaels, while conce	entrating on		
their underlying ec	onomics and economic intuition. They learn to use market instruments and market analyses to design efficient investment and hedgi	ng strategies and r	methods for		
0.005	the company capital management nurled to financial markets.	_ -: -	-		
G63E2302	Controlling	Z,ZK	6		
The aim of the course is to explain the substance of controller's work - application of management control systems into business corporation (incl. tools like cost allocations, budgeting,					
ļ,	standard costing, cost accounting and balanced scorecard).				
G77E2011	Industry 4.0	ZK	3		
1. Visions of Indus	try 4.0 2. Virtualization and System Integration of Manufacturing Facilities 3. Knowledge representation of Manufacturing Systems by	Multi-Agent and A	utonomous		
Systems 4. Ontol	ogical Knowledge 5. Analytical Methods and Big-Data Systems 6. Implementation Architectures for Industry 4.0 Systems 7. Modellin	g Methods 8. Simu	lations for		

Design and Rump-up of Industry 4.0 Systems 9. Modular SCADA Systems 10. Virtual and Augmented Reality Systems 11. Typical Projects of Industry 4.0 12. Typical of Industry 4.0 13. Testbeds and Their Implementation 14. Impacts of Industry 4.0

For updated information see <u>http://bilakniha.cvut.cz/en/FF.html</u> Generated: day 2025-08-11, time 15:40.