Study plan

Name of study plan: Project management, prezenční forma, AR 2022/2023

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: 120
Elective courses credits: 0
Sum of credits in the plan: 120
Note on the plan:

Name of the block: Compulsory courses
Minimal number of credits of the block: 81
The role of the block: Z

Code of the group: PJM P 1S 22/23 PV
Name of the group: Povinné předměty, 1. sem. Project management, prezenční forma,
Requirement credits in the group: In this group you have to gain at least 24 credits
Requirement courses in the group: In this group you have to complete at least 4 courses
Credits in the group: 24
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
G16E1401	**Marketing Innovations** ***Marek Jemala***	Z,ZK	6	2P+2C	Z	z
G16C1401	**Innovation Marketing** ***Tomáš Sadílek***	Z,ZK	6	2P+2C		z
G16C1201	**Project Management** ***Petr Fanta***	Z,ZK	6	2P+2C		z
G63C1301	**Corporate Financial Management**	Z,ZK	6	2P+2C		z
G63C1102	**Statistical Analysis** ***Jiří Zmatlík***	Z,ZK	6	2P+2C		z

Characteristics of the courses of this group of Study Plan: Code=PJM P 1S 22/23 PV Name=Povinné předměty, 1. sem. Project management, prezenční forma,

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 beginning of the innovation process, innovative marketing should help identify new market opportunities and risks and improve the research of customer needs. During developing a new product, innovation marketing is to ensure the constant involvement of customers and users in this process. And at the end of the innovation process, innovation marketing ensures the successful introduction of a new product, technology, and service to the target audience. Innovation marketing should therefore be present at all stages of the innovation process to ensure that customer and market orientation is in line with advances in products and technologies, which often lead to the application of new marketing approaches. We address these main aspects in this subject.			
G16C1401	Innovation Marketing	Z,ZK	6
G16C1201	Project Management	Z,ZK	6
G63C1301	Corporate Financial Management	Z,ZK	6
The course provides a comprehensive view of building the essential aspects of financial management of business processes and projects. Students have the opportunity to understand the main concepts, tools and methods of financial management of processes and projects and their use in decision-making practice. Substantial emphasis is placed on evaluating the financial performance of the company, evaluation and valuation of tangible and financial investment projects, working capital management, methods of financing the company, project financing, methods of financial planning and forecasting, and valuation techniques.			
G63C1102	Statistical Analysis	Z,ZK	6
The course builds on the introductory courses of statistics and prefaces slightly advanced statistical analysis methods.			

Code of the group: PJM P 2S 22/23 PV
Name of the group: Povinné předměty, 2. sem. Project management, prezenční forma,
Requirement credits in the group: In this group you have to gain at least 18 credits
Requirement courses in the group: In this group you have to complete at least 5 courses

Credits in the group: 18
Note on the group:

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
G63C2301	**Controlling** ***Theodor Beran***	Z,ZK	6	2P+2C	L	z
G63C2302	**Financial Law**	ZK	3	2P+0C		z
G63C2201	**Microeconomic Theory** ***Petr Makovský***	ZK	3	2P+0C	*	z
G00C3101	**Diploma Thesis Project** ***Petr Vymětal***	Z	0	1P+0C		z
G16C2501	**HR Management Systems** ***Martin Šikýř***	Z,ZK	6	2P+2C		z

Characteristics of the courses of this group of Study Plan: Code=PJM P 2S 22/23 PV Name=Povinné předměty, 2. sem. Project management, prezenční forma,

G63C2301	Controlling	Z,ZK	6
Controlling methods are presented from the initial detection of deviations to advanced models of managerial decision support in strategic horizons in the context and against the background of the management of basic business processes with an emphasis on the processes determining the effect of added value in the company's activities. The tasks of controlling are systematically explained according to the time perspective in the scope of corporate strategies and operational management, including the role of the controller in the individual phases of management from analysis to reporting. The content of the course is also focused on the presentation of methods and management tools that can be used to manage individual components (entities) in mutual interaction, especially in the area of cost management. Examples of models and case studies and tasks are used to present the key principles of controlling in the company.			
G63C2302	Financial Law	ZK	3
G63C2201	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.			
G00C3101	Diploma Thesis Project	Z	0
G16C2501	HR Management Systems	Z,ZK	6
The course is focused on the development of managerial skills in managing people in the organization. Through lectures and seminars, students will learn effective strategies, policies and practices for efficient people management in the organization and the main tasks of managers in various activities of people management in the organization.			

Code of the group: PJM P 3S 22/23 PV
Name of the group: Povinné předměty, 3. sem. Project management, prezenční forma,
Requirement credits in the group: In this group you have to gain at least 21 credits
Requirement courses in the group: In this group you have to complete at least 4 courses
Credits in the group: 21
Note on the group:

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
32MC-P-MACT-01	**Macroeconomic Theory** *Petr Makovský* ***Petr Makovský*** *Petr Makovský (Gar.)*	ZK	3	2P+0C		z
G63C3201	*Petr Makovský* ***Petr Makovský*** *Petr Makovský (Gar.)*	ZK	3	2P+0C	Z	z
32MC-P-ROAN-01	**Decision Analysis** *Jiří Zmatlík* ***Jiří Zmatlík*** *Jiří Zmatlík (Gar.)*	Z,ZK	6	2P+2C		z
G16C3103	***Lucie Plzáková***	Z,ZK	6	2P+2C		z
G16C3102	**Innovation Management and Innovation Project** ***Dagmar Skokanová***	Z,ZK	6	2P+2C		z
32MC-P-RIIP-01	**Innovation Management and Innovation Project** *Petr Fanta* ***Petr Fanta*** *Petr Fanta (Gar.)*	Z,ZK	6	2P+2C		z
G16C3101	***Dana Zadražilová***	Z,ZK	6	2P+2C	Z	z
32MC-P-STRR-01	**Strategic Management** *Dana Zadražilová, Tomáš Sadílek, Vladimíra Šilhánková* ***Tomáš Sadílek*** *Dana Zadražilová (Gar.)*	Z,ZK	6	2P+2C		z

Characteristics of the courses of this group of Study Plan: Code=PJM P 3S 22/23 PV Name=Povinné předměty, 3. sem. Project management, prezenční forma,

32MC-P-MACT-01	Macroeconomic Theory	ZK	3
G63C3201		ZK	3
32MC-P-ROAN-01	Decision Analysis	Z,ZK	6
The aim of the subject Decision Analysis is to acquaint students with the basic methods of decision-making in technical and economic, to use appropriate tools within decision-making processes.			
G16C3103		Z,ZK	6

G16C3102	Innovation Management and Innovation Project	Z,ZK	6
Concepts of innovation, prerequisites and barriers to innovation, sources of innovation, strategic considerations of innovation, process innovation, product innovation, service innovation, a macroeconomic view of the role of innovation, organizational support and management of innovation, soft methods and techniques of innovation, systematic-analytical methods and techniques of innovation, economic aspects of innovation, intellectual property of innovation and legal aspects.			
32MC-P-RIIP-01	Innovation Management and Innovation Project	Z,ZK	6
Concepts of innovation, prerequisites and barriers to innovation, sources of innovation, strategic considerations of innovation, process innovation, product innovation, service innovation, a macroeconomic view of the role of innovation, organizational support and management of innovation, soft methods and techniques of innovation, systematic-analytical methods and techniques of innovation, economic aspects of innovation, intellectual property of innovation and legal aspects.			
G16C3101		Z,ZK	6
32MC-P-STRR-01	Strategic Management	Z,ZK	6
The subject is focused on strategic planning and management, including the necessary contexts and links, as one of the main tools for long-term planning and direction of the organization as a whole or part of it (enterprise or institution of any type or even municipality, region or state). As part of teaching the subject, relevant case studies from practice will be used. In the center of attention are questions of competitiveness, competitive advantages, changes in the configuration of business processes and their influence on the process of integration of the Czech economy and Czech companies into global trade.			

Code of the group: PJM P 4S 22/23 PV
Name of the group: Povinné předměty, 4. sem. Project management, prezenční forma
Requirement credits in the group: In this group you have to gain at least 18 credits
Requirement courses in the group: In this group you have to complete at least 2 courses
Credits in the group: 18
Note on the group:

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
32MC-P-DIPR-01	**Diploma Thesis** *Petr Makovský, Jiří Zmatlík, Petr Fanta, Dana Zadražilová, Tomáš Sadílek, Vladimíra Šilhánková, Miroslav Sponer, Michael Pondělíček, Dalibor Vytlačil, ...*	Z	12			z
G00C4102	**Diploma Thesis** ***Petr Vymětal***	Z	12			z
32MC-P-PRIS-01	**Information System Design** *Jiří Kaiser* ***Jiří Kaiser*** *Jiří Kaiser (Gar.)*	Z,ZK	6	2P+2C		z
G63C4401	**Information System Design** ***Jiří Kaiser***	Z,ZK	6	2P+2C		z
32ME-P-SCOM-01	**Social Competences in Project and Process Management** *Petr Fanta* ***Petr Fanta*** *Petr Fanta (Gar.)*	Z	3	0P+2C		z

Characteristics of the courses of this group of Study Plan: Code=PJM P 4S 22/23 PV Name=Povinné předměty, 4. sem. Project management, prezenční forma

32MC-P-DIPR-01	Diploma Thesis	Z	12
G00C4102	Diploma Thesis	Z	12
32MC-P-PRIS-01	Information System Design	Z,ZK	6
Fundamental terms, information systems architecture, basic types of software applications for information system of enterprise, information system lifecycle, approaches to information system development, management information systems, web audit, business process modeling using BPMN, UML and others, information system modeling - UML and data modeling using ER diagrams			
G63C4401	Information System Design	Z,ZK	6
Fundamental terms, information systems architecture, basic types of software applications for information system of enterprise, information system lifecycle, approaches to information system development, management information systems, web audit, business process modeling using BPMN, UML and others, information system modeling - UML and data modeling using ER diagrams			
32ME-P-SCOM-01	Social Competences in Project and Process Management	Z	3
The course is focused on the development of skills in managing projects, processes, and people in the organization.			

Name of the block: Povinné předměty zaměření
Minimal number of credits of the block: 18
The role of the block: PZ

Code of the group: PJM P 22/23 SP
Name of the group: Specializační předměty, Project management, prezenční forma
Requirement credits in the group: In this group you have to gain at least 18 credits
Requirement courses in the group: In this group you have to complete at least 3 courses
Credits in the group: 18
Note on the group:

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
32ME-P-AGBC-01	**Agile BootCamp** *Petr Fanta, Petra Jílková, Dagmar Skokanová* ***Dagmar Skokanová*** *Petr Fanta (Gar.)*	KZ	3	24B		PZ
G16E2201	**Modern Approaches in Project Management** ***Oldřich Bronec***	Z,ZK	6	2P+2C	L	PZ
32ME-P-PTMN-01	**Project Technology Management** *Marek Jemala* ***Marek Jemala*** *Marek Jemala (Gar.)*	Z,ZK	6	2P+2C		PZ
G16E0202	**Project Technology Management** ***Marek Jemala***	Z,ZK	6	2P+2C		PZ
G16E0501	**Social Competences in Project and Process Management** ***Martin Šikýř***	Z	3	0P+2C		PZ
G16E1201	**Standards of Project Management** ***Petr Fanta***	Z,ZK	6	2P+2C		PZ

Characteristics of the courses of this group of Study Plan: Code=PJM P 22/23 SP Name=Specializační předměty, Project management, prezenční forma

32ME-P-AGBC-01	Agile BootCamp	KZ	3

Agile Bootcamp course teaches students the fundamentals of Design Thinking and other agile innovation principles. The course introduces three methods that work well together within the same cross-functional team: Design Thinking, Lean Startup and Agile across teams. In the main part, it will offer the right tools and techniques for the design and implementation of Design Sprints, including a practical test of the entire process.

G16E2201	Modern Approaches in Project Management	Z,ZK	6
32ME-P-PTMN-01	Project Technology Management	Z,ZK	6

Technology project management means not only decisions about one's own technological research, innovative cooperation, or technology transfer. Technological innovations, especially in production, have long tied up company resources, and poor decisions can pose significant financial problems for most companies. Therefore, it is necessary to examine the preparatory, implementation, and commercial activities of technology management in a more comprehensive form. Technology project management is more goal-oriented, time-bound, and has a project organizational structure and budget. After completing the course, students should answer the following framework topics: define the nature, importance, and key functions of project technology management with a focus on the analysis of technological trends, risks, and opportunities, innovation radar, and technology assessment. Explain the relationships of business management to the development of the product, production, and service technologies. Characterize the process of technological forecasts, foresight, and creation of the technology strategy of the company. Explain creating a project plan for implementing new technology. Clarify the importance of the necessary protection of technological intellectual property and the need to commercialize their own technologies at the level of industry, region, or state.

G16E0202	Project Technology Management	Z,ZK	6

Technology project management means not only decisions about one's own technological research, innovative cooperation, or technology transfer. Technological innovations, especially in production, have long tied up company resources, and poor decisions can pose significant financial problems for most companies. Therefore, it is necessary to examine the preparatory, implementation, and commercial activities of technology management in a more comprehensive form. Technology project management is more goal-oriented, time-bound, and has a project organizational structure and budget. After completing the course, students should answer the following framework topics: define the nature, importance, and key functions of project technology management with a focus on the analysis of technological trends, risks, and opportunities, innovation radar, and technology assessment. Explain the relationships of business management to the development of the product, production, and service technologies. Characterize the process of technological forecasts, foresight, and creation of the technology strategy of the company. Explain creating a project plan for implementing new technology. Clarify the importance of the necessary protection of technological intellectual property and the need to commercialize their own technologies at the level of industry, region, or state.

G16E0501	Social Competences in Project and Process Management	Z	3
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.

Name of the block: Compulsory elective courses
Minimal number of credits of the block: 21
The role of the block: PV

Code of the group: PJM P 22/23 PVP
Name of the group: Povinně volitelné předměty, Project management, prezenční forma
Requirement credits in the group: In this group you have to gain at least 12 credits
Requirement courses in the group:
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
32ME-P-ADFM-01	**Advanced Topics in Financial Management** *Helmuth Yesid Arias Gomez, Tuugi Tugsjargal Chuluun* ***Tuugi Tugsjargal Chuluun*** *Tuugi Tugsjargal Chuluun (Gar.)*	Z,ZK	3	0P+2C		PV
G16C0101	**Balanced Scorecard**	Z,ZK	6	2P+2C	Z,L	PV
G16E2302	**Business Process Management** ***Petra Šeráková***	Z,ZK	6	2P+2C		PV
32ME-P-BPMN-01	**Business Process Management** *Petra Šeráková* ***Petra Šeráková*** *Petra Šeráková (Gar.)*	Z,ZK	6	2P+2C		PV

32ME-P-CHIN-01	**China's Innovations and Global Influence** *Jan Švec* ***Jan Švec*** *Jan Švec (Gar.)*	ZK	3	2P+0C		PV
127CP11	**City Planning 11** *Jiří Kugl, Ivan Horký, Václav Jetel, Jiří Kupka* ***Jiří Kugl*** *Jiří Kugl (Gar.)*	ZK	2	2P	Z,L	PV
32ME-P-CLCH-01	**Climate Change Causalities** *Michael Pondělíček* ***Michael Pondělíček*** *Michael Pondělíček (Gar.)*	Z,ZK	6	3P+1C		PV
32MC-P-VLAD-01	**Public Sector Governance** *Radim Bureš* ***Radim Bureš*** *Radim Bureš (Gar.)*	Z	3	0P+2C		PV
G63E3301	**Economic and Financial Modelling** ***Jiří Zmatlík***	KZ	3	0P+2C		PV
32ME-P-EFNM-01	**Economic and Financial Management** *Jiří Zmatlík* ***Jiří Zmatlík*** *Jiří Zmatlík (Gar.)*	KZ	3	0P+2C		PV
G63E0201	**Economics of Climate Change** ***Ondřej Kolínský***	Z,ZK	6	2P+2C		PV
32ME-P-ECCH-01	**Economics of Climate Change**	Z,ZK	6	2P+2C		PV
32ME-P-ENIC-01	**English for Intercultural Communication** *Ondřej Galuška, Kryštof Beták Ondřej Galuška (Gar.)*	Z,ZK	6	0P+4C		PV
G04E0201	**English for Intercultural Communication** ***Ondřej Galuška***	Z,ZK	6	0P+4C	Z,L	PV
G65C0202	**Environmental Aspects of Regional Development** ***Michael Pondělíček***	ZK	3	2P+0C		PV
32MC-P-ENAR-01	**Environmental Aspects of Regional Development** *Michael Pondělíček* ***Michael Pondělíček*** *Michael Pondělíček (Gar.)*	ZK	3	2P+0C		PV
G65E4101	**European Union and Regional Policy** ***Petr Fanta***	ZK	3	2P+0C		PV
32ME-P-EUPO-01	**European Union and Regional Policy** *Petr Fanta* ***Petr Fanta*** *Petr Fanta (Gar.)*	ZK	3	2P+0C		PV
32ME-P-FMRI-01	**Financial Markets and Risk Management** ***Helmuth Yesid Arias Gomez***	Z,ZK	6	2P+2C		PV
G63E2301	**Financial Markets and Risk Management** ***Helmuth Yesid Arias Gomez***	Z,ZK	6	2P+2C	L	PV
G63E0202	**Green Transition** ***Ondřej Kolínský***	Z,ZK	6	2P+2C		PV
32ME-P-PIMN-01	**Innovation Project Management** *Marek Jemala* ***Marek Jemala*** *Marek Jemala (Gar.)*	Z,ZK	6	2P+2C		PV
32-IPW-6	**International Project Workshop** ***Vincent Blaise Montenero***	ZK	6	45B		PV
127XKRS	**Landscape and Settlements** *Jiří Kupka, Zuzana Pešková* ***Jiří Kupka*** *Jiří Kupka (Gar.)*	Z	2	2P	L	PV
G16E1302	**Lean Manufacturing** ***Marek Jemala***	Z,ZK	6	2P+2C		PV
32ME-P-LEAN-01	**Lean Manufacturing** ***Marek Jemala***	Z,ZK	6	2P+2C		PV
32ME-P-MINE-01	**Management in International Environment** *Vincent Blaise Montenero* ***Vincent Blaise Montenero*** *Vincent Blaise Montenero (Gar.)*	Z,ZK	3	1P+1C		PV
G16E0102	**Managing in an International Environment** ***Vincent Blaise Montenero***	Z,ZK	3	1P+1C		PV
G04E0202	**Meetings and Negotiations in English** ***Dagmar Skokanová***	Z,ZK	6	0P+4C	L	PV
32ME-P-MNEN-01	**Meetings and Negotiations in English** *Gene Maurice Prior* ***Gene Maurice Prior*** *Gene Maurice Prior (Gar.)*	Z,ZK	6	0P+4C		PV
32ME-P-MEPO-01	**Monetary Economics and Policy** *Aliya Algozhina* ***Aliya Algozhina*** *Aliya Algozhina (Gar.)*	Z,ZK	6	2P+2C		PV
G63E4201	**Monetary Economics and Policy** ***Aliya Algozhina***	Z,ZK	6	2P+2C		PV
G66C0101	**Reflections of Technical Innovations in Culture** ***Kateřina Tomešková***	ZK	3	2P+0C	L	PV
32MC-P-OTIK-01	**Reflections of Technical Innovations in Culture** *Kateřina Tomešková* ***Kateřina Tomešková*** *Kateřina Tomešková (Gar.)*	ZK	3	2P+0C		PV
G00C4104	**Practice** ***Soňa Cupalová***	Z	6	180XH		PV
32MC-P-PRX1-01	**Internship** *Soňa Cupalová, Libor Cupal* ***Soňa Cupalová*** *Soňa Cupalová (Gar.)*	Z	6	180XH		PV
G16C0301	**Lean Management Practice** ***Tomáš Sadílek***	ZK	3	0P+2C		PV
G16E0203	**Project Innovation Management** ***Marek Jemala***	Z,ZK	6	2P+2C		PV
G65C0103		Z,ZK	3	1P+1C		PV
G65E2301	**Regional Development and Planning**	Z,ZK	6	2P+2C	Z,L	PV
32ME-P-RDPL-01	**Regional Development and Planning**	Z,ZK	6	2P+2C		PV
32MC-P-RGIS-01	**Regional Studies** *Vladimíra Šilhánková* ***Vladimíra Šilhánková*** *Vladimíra Šilhánková (Gar.)*	ZK	3	2P+0C		PV

G16C0104	**Solving Real World Problems** ***Tomáš Sadílek***	ZK	3	0P+2C		PV
G16C0201	**Service Design** ***Petra Jílková***	Z,ZK	3	0P+2C		PV
G16E3301	**Six Sigma** ***Tomáš Macák***	ZK	3	0P+2C		PV
32ME-P-6SIG-01	**Six Sigma** *Tomáš Macák* ***Tomáš Macák*** *Tomáš Macák (Gar.)*	ZK	3	0P+2C		PV
G65E1301	**Smart Cities and Regions** ***Martin Maštálka***	Z,ZK	6	2P+2C		PV
32ME-P-SMCR-01	**Smart Cities and Regions** *Martin Maštálka* ***Martin Maštálka*** *Martin Maštálka (Gar.)*	Z,ZK	6	2P+2C		PV
32MC-P-SVRG-01	**Social Relations in the Regions** *Lucie Plzáková Lucie Plzáková (Gar.)*	Z,ZK	3	1P+1C		PV
32MC-P-SPOL-01	**Public and Private Sector Collaboration** *Radim Bureš, Libor Cupal* ***Radim Bureš*** *Radim Bureš (Gar.)*	Z,ZK	3	1P+1C		PV
G16E0401	**Strategies of Entering New Markets** ***Vincent Blaise Montenero***	Z,ZK	3	1P+1C		PV
32ME-P-SENM-01	**Strategies of Entering New Markets** *Vincent Blaise Montenero* ***Vincent Blaise Montenero*** *Vincent Blaise Montenero (Gar.)*	Z,ZK	3	1P+1C		PV
G65C0201	**Territorial Management Planning** ***Vladimíra Šilhánková***	ZK	3	2P+0C		PV
32MC-P-ZRIB-01	**Information Security Management and Implementation** *Jaroslav Burčík* ***Jaroslav Burčík*** *Jaroslav Burčík (Gar.)*	ZK	3	2P+0C		PV

Characteristics of the courses of this group of Study Plan: Code=PJM P 22/23 PVP Name=Povinně volitelné předměty, Project management, prezenční forma

32ME-P-ADFM-01	Advanced Topics in Financial Management	Z,ZK	3
This hands-on, applied course equips students with the main valuation models that are crucial tools for financial analysts. Key topics include reading and using financial statements, stock valuation using multiple techniques, and presenting financial market research. The course evolves from conceptual foundations to highly practical applications. Students will first master the main valuation models through problem sets and then apply these models in real-world scenarios using business case studies. Throughout the semester, we will discuss and present on global financial and economic news.			
G16C0101	Balanced Scorecard	Z,ZK	6
G16E2302	Business Process Management	Z,ZK	6
32ME-P-BPMN-01	Business Process Management	Z,ZK	6
32ME-P-CHIN-01	China's Innovations and Global Influence	ZK	3
The course provides an exploration of China's ability to combine dictatorship with technology innovations, and its growing global role including an impact on Europe. We will start with an introduction to China's political and economic system. That would give us the important basis for understanding Chinas technological innovations and rising global influence. We will discuss the role of technology in everyday life in China, how it impacts economy, but also how the government abuses technology to control people. In further detail, we will cover Chinas global role and how dependence on China might impact Europe. Last but not least, we will hypothesize on Chinas future development and its obstacles.			
127CP11	City Planning 11	ZK	2
Concepts in urban space design in history, form of the city, typology of urban space, philosophies behind, practices of urban space design in European cultural context, land-use, planning controle, preservation of cities, urban ecology, trends and policies in urban planning and regional development.			
32ME-P-CLCH-01	Climate Change Causalities	Z,ZK	6
The course gives the students an overview of the links and relationships between adaptation, resiliency, and mitigation. In the field of state administration and self-government, industry and development, and the environment and processes associated with the preparation of investments, the students will be able to identify and evaluate appropriate basic measures and estimate the main adaptation processes and their difficulty for a given settlement or area. Students will get clear information about the processes and activities associated with the planning and implementation of adaptations and mitigations on a living basis, but also at the regional, national, and European level. The course focuses, among other things, on students' practical knowledge of the effects of climate change, so managers from practice will be invited to lessons or seminars.			
32MC-P-VLAD-01	Public Sector Governance	Z	3
G63E3301	Economic and Financial Modelling	KZ	3
The course is organized in 2 seminars weekly, 3 credits. Analyzing and solving models of optimal allocation of assets, management of risk, and Portfolio allocation			
32ME-P-EFNM-01	Economic and Financial Management	KZ	3
The course is organized in 2 seminars weekly, 3 credits. Analyzing and solving models of optimal allocation of assets, management of risk, and Portfolio allocation			
G63E0201	Economics of Climate Change	Z,ZK	6
32ME-P-ECCH-01	Economics of Climate Change	Z,ZK	6
32ME-P-ENIC-01	English for Intercultural Communication	Z,ZK	6
The seminar will focus on the importance of accuracy and comprehension in communication in a foreign language, and highlight cultural differences influencing communication, and examine the role of language means in intercultural negotiations. Outline of the subject: . Approaches to culture . Cultural and language context in communication . Intercultural theories and their influence on behaviour and language expression . International English as lingua franca . The most common mistakes as a cause of misunderstanding . Language practice and activities . Case studies on individual topics Language level: CEFR B2			
G04E0201	English for Intercultural Communication	Z,ZK	6
The seminar will focus on the importance of accuracy and comprehension in communication in a foreign language, and highlight cultural differences influencing communication, and examine the role of language means in intercultural negotiations. Outline of the subject: . Approaches to culture . Cultural and language context in communication . Intercultural theories and their influence on behaviour and language expression . International English as lingua franca . The most common mistakes as a cause of misunderstanding . Language practice and activities . Case studies on individual topics Language level: CEFR B2			
G65C0202	Environmental Aspects of Regional Development	ZK	3
32MC-P-ENAR-01	Environmental Aspects of Regional Development	ZK	3
G65E4101	European Union and Regional Policy	ZK	3
The course discusses developments in the EU and in the EU Regional Policy from the end of the Cold War until today. It focuses on relevant issues of the integration process. It is based on lectures, class discussions and presentations of various positions present in the debates (group projects / own positions). The objectives of the course are to explain a modern development of the EU, analyse key points in particular areas of integration and practise argumentation skills.			

32ME-P-EUPO-01	European Union and Regional Policy	ZK	3
The course discusses developments in the EU and in the EU Regional Policy from the end of the Cold War until today. It focuses on relevant issues of the integration process. It is based on lectures, class discussions and presentations of various positions present in the debates (group projects / own positions). The objectives of the course are to explain a modern development of the EU, analyse key points in particular areas of integration and practise argumentation skills.			
32ME-P-FMRI-01	Financial Markets and Risk Management	Z,ZK	6
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 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 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 required. 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 the market value of the firms assets as compared 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 these models, while concentrating on their underlying economics and economic intuition. They learn to use market instruments and market analyses to design efficient investment and hedging strategies and methods for the company capital management hurled to financial markets.			
G63E2301	Financial Markets and Risk Management	Z,ZK	6
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 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 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 required. 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 the market value of the firms assets as compared 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 these models, while concentrating on their underlying economics and economic intuition. They learn to use market instruments and market analyses to design efficient investment and hedging strategies and methods for the company capital management hurled to financial markets.			
G63E0202	Green Transition	Z,ZK	6
Green transition is sometimes imagined as a technical question involving mostly energy production and industrial processes. Nonetheless, wider societal, economic and political contexts are indispensable to successful transformation. The course introduces different transition approaches focusing on such wider frameworks and stressing the interconnections between politics, markets, industry, and social changes. Theoretical concepts of transformation will then be linked to current reality in specific regions (with emphasis on but not limited to the EU).			
32ME-P-PIMN-01	Innovation Project Management	Z,ZK	6
Successful innovation requires much more than the management of individual aspects of the innovation process within the institution; it also requires a systemic project approach that deals with the interactions between various stakeholders, their goals, objectives, markets, and organizations. Traditional innovation management usually focuses on goals and procedures for innovation planning, usually on implementation and control within the institution. Procedures are often repeated. This creates a framework that can limit project team members to working only within the set of rules and measures of the institution. However, most innovation projects require an individual approach so that project team members are highly flexible, innovative, and creative. Each innovation project is individual and requires an individual approach. A clear strategy in the area of innovation, a supportive corporate culture, a focus on the socio-ecological goals of innovation, constant study of trends and risks, an appropriate budget, Change- and Risk management, and adequate motivation for innovation are often the basic prerequisites for an innovation project. The main goal of this course is to acquaint students with the key specifics of innovation projects, Innovation management, the implementation and commercialization of innovations, and related intellectual property protection. After completing the course, the student should answer the following framework topics: how to identify and manage the framework of an innovation project, create a project breakdown structure, create a project innovation plan, create a project budget, define and allocate resources for innovation, manage project development, identify and manage innovation risks, and understand the sourcing process for the project. How to adequately protect intellectual property and how to implement and commercialise innovations. The course includes approaches, experience, and examples of the best innovative companies.			
32-IPW-6	International Project Workshop	ZK	6
127XKRS	Landscape and Settlements	Z	2
The optional course presents selected chapters on landscape architecture and urbanism, focusing on two thematic blocks - garden art and settlements (urban and rural). It complements the series of compulsory and optional courses at Bachelor and Master level in Environmental Engineering and Architecture and Civil Engineering with various aspects, perspectives and complementary topics that were not covered in the compulsory and optional courses.			
G16E1302	Lean Manufacturing	Z,ZK	6
As a result of completing 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 of the company. Characterize pre-production, production, and manufacturing processes and related Lean manufacturing innovation processes. Create an innovation strategy and an innovation project with a focus on Lean. Clarify the importance of joint planning/forecasting of upcoming Lean products, services, and production technologies in the company. Etc.			
32ME-P-LEAN-01	Lean Manufacturing	Z,ZK	6
32ME-P-MINE-01	Management in International Environment	Z,ZK	3
G16E0102	Managing in an International Environment	Z,ZK	3
The preparatory phase. Implementation: knowledge transfer and possible adaptations. Strategic partnership and consequences on the cooperation. Relations with other foreign stakeholders. The DFI and its constraints. Parent company versus locals. Managing multi-cultural teams. Remote management. Expatriation. Managerial skills and competences. Knowing oneself and developing ones competences.			
G04E0202	Meetings and Negotiations in English	Z,ZK	6
English for Meetings and Negotiations is part of a series of courses for follow-up students focused on functional language. The course is intended for students at the upper intermediate level. The course focuses on a collaborative model of the English language intended for a range of business or business meetings and negotiations. Although the course is not primarily focused on confrontational negotiation and communication strategies, part of the explanation is devoted to strategies and language for preventing and coping with confrontational situations. The course is based on the modern, increasingly widespread model of "International English", ie international English understood as lingua franca. Listening materials work with recordings of native speakers of all English styles and focus on collocations and idiomatics of American and British English.			
32ME-P-MNEN-01	Meetings and Negotiations in English	Z,ZK	6
English for Meetings and Negotiations is part of a series of courses for follow-up students focused on functional language. The course is intended for students at the upper intermediate level. The course focuses on a collaborative model of the English language intended for a range of business or business meetings and negotiations. Although the course is not primarily focused on confrontational negotiation and communication strategies, part of the explanation is devoted to strategies and language for preventing and coping with confrontational situations. The course is based on the modern, increasingly widespread model of "International English", ie international English understood as lingua franca. Listening materials work with recordings of native speakers of all English styles and focus on collocations and idiomatics of American and British English.			

32ME-P-MEPO-01	Monetary Economics and Policy	Z,ZK	6
This course provides the main concepts of monetary economics, emphasizing how monetary policy can affect the domestic economy. It consists of three major parts. The first part starts with a definition of money, its functions, and its measures in a form of monetary aggregates statistics compiled by central banks. It leads then to the inner workings of financial markets, particularly the interest rate dynamics of bonds and stocks. The second part focuses on a practical conduct of monetary policy. How money supply is created, what monetary policy tools affect the market interest rate, and how central banks can intervene in the foreign exchange market to regulate the exchange rate. The third part sheds light on the theoretical frameworks of money, aggregate demand-supply analysis based on a monetary policy curve, and channels through which the changes in policy interest rate transmit to the aggregate output and inflation. Nonconventional monetary policy during the global financial crisis of 2007-2009 when countries reached their zero-lower bound of interest rates is demonstrated too. For the case of Czech monetary policy, a guest speaker from the Czech National Bank will be invited to give his/her presentation and answer any specific questions, which may interest students in practice.			
G63E4201	Monetary Economics and Policy	Z,ZK	6
This course covers basic concepts from monetary economics, emphasizing how monetary policy can affect the domestic economy. It consists of two major parts. The first one starts with the definition of money, its functions, and monetary aggregates and leads to the inner workings of financial markets, particularly interest rate dynamics. The second one combines the practical conduct of monetary policy by central banks with the theoretical frameworks of what explains inflation in the long run and how monetary policy can stabilize the economy and inflation. The leading textbook is Mishkin (2022) listed with other optional readings below. There will be lectures and exercise sessions, where different problem sets based on lecture materials are solved together in class.			
G66C0101	Reflections of Technical Innovations in Culture	ZK	3
The subject is intended for students of the Master's study program Project Management of Innovations. The teaching is aimed at gaining a wide range of knowledge from the field of innovation processes, for the understanding and internalization of which a deep understanding of the connections between science and culture is an absolutely key.			
32MC-P-OTIK-01	Reflections of Technical Innovations in Culture	ZK	3
The course is intended for students of the Master's study program Project Management of Innovations. The teaching is aimed at gaining a wide range of knowledge from the field of innovation processes, for the understanding and internalization of which a deep understanding of the connections between science and culture is an absolutely key.			
G00C4104	Practice	Z	6
The classification of the subject of professional practice is based on the decision of the MÚVS ČVUT during their studies to give students the opportunity to acquire quality skills and experience. MÚVS supports the establishment of a relationship between students and companies and emphasizes their mutual cooperation Part of the study plans is short-term professional internship of a pilot nature.			
32MC-P-PRX1-01	Internship	Z	6
The classification of the subject of professional practice is based on the decision of the MÚVS ČVUT during their studies to give students the opportunity to acquire quality skills and experience. MÚVS supports the establishment of a relationship between students and companies and emphasizes their mutual cooperation Part of the study plans is short-term professional internship of a pilot nature.			
G16C0301	Lean Management Practice	ZK	3
The aim of the course is to apply knowledge from the field of lean management and lean manufacturing acquired during the study to solve real problems from economic practice. According to the client's assignment, student teams solve the problem with the support of teachers who become their mentors.			
G16E0203	Project Innovation Management	Z,ZK	6
Successful innovation requires much more than the management of individual aspects of the innovation process within the institution; it also requires a systemic project approach that deals with the interactions between various stakeholders, their goals, objectives, markets, and organizations. Traditional innovation management usually focuses on goals and procedures for innovation planning, usually on implementation and control within the institution. Procedures are often repeated. This creates a framework that can limit project team members to working only within the set of rules and measures of the institution. However, most innovation projects require an individual approach so that project team members are highly flexible, innovative, and creative. Each innovation project is individual and requires an individual approach. A clear strategy in the area of innovation, a supportive corporate culture, a focus on the socio-ecological goals of innovation, constant study of trends and risks, an appropriate budget, Change- and Risk management, and adequate motivation for innovation are often the basic prerequisites for an innovation project. The main goal of this course is to acquaint students with the key specifics of innovation projects, Innovation management, the implementation and commercialization of innovations, and related intellectual property protection. After completing the course, the student should answer the following framework topics: how to identify and manage the framework of an innovation project, create a project breakdown structure, create a project innovation plan, create a project budget, define and allocate resources for innovation, manage project development, identify and manage innovation risks, and understand the sourcing process for the project. How to adequately protect intellectual property and how to implement and commercialise innovations. The course includes approaches, experience, and examples of the best innovative companies.			
G65C0103		Z,ZK	3
G65E2301	Regional Development and Planning	Z,ZK	6
he goal is to understand the reason, mission and specifics of regional and municipal development in the context of European Union as well as Czech Republic, and of planning as a tool of development. Students should know the core European concepts of regional and municipal development. A particular attention will be paid to the Middle-European planning culture and planning system, which is rooted in the mutual interactions between spatial, urban, strategic and environmental planning. Students should perceive development from the perspectives of different stakeholders and professions, and understand the need of cooperation, participation and democracy in practice.			
32ME-P-RDPL-01	Regional Development and Planning	Z,ZK	6
The goal is to understand the reasons, missions and specifics of regional and municipal development in the context of European Union as well as Czech Republic, and of planning as a tool of development. Students should get familiar with the core European concepts of regional and municipal development; particular attention will be paid to the Middle-European planning culture rooted in the mutual interactions between spatial, urban, strategic and environmental planning. Students should perceive development from the perspectives of different stakeholders and professions, and understand the need of cooperation, participation and democracy in practice.			
32MC-P-RGIS-01	Regional Studies	ZK	3
G16C0104	Solving Real World Problems	ZK	3
The aim of the course is to apply knowledge from the field of economics and management acquired during the study to solve real problems from economic practice. According to the client's assignment, students solve the problem with the support of teachers who become their mentors.			
G16C0201	Service Design	Z,ZK	3
G16E3301	Six Sigma	ZK	3
The course is aimed at practical application of how the individual components (methods and techniques - mainly applied statistical methods and techniques) used in this approach and a common application of these components throughout the DMAIC cycle (Define, Measure, Analyze, Improve, Control).			
32ME-P-6SIG-01	Six Sigma	ZK	3
G65E1301	Smart Cities and Regions	Z,ZK	6
Smart Cities and Smart Regions study introduces students to the interdisciplinary issue Smart Cities, preparing concept SC and its planning and indicators.			
32ME-P-SMCR-01	Smart Cities and Regions	Z,ZK	6
Smart Cities and Smart Regions study introduces students to the interdisciplinary issue Smart Cities, preparing concept SC and its planning and indicators.			
32MC-P-SVRG-01	Social Relations in the Regions	Z,ZK	3
32MC-P-SPOL-01	Public and Private Sector Collaboration	Z,ZK	3
The course on Public-Private Partnerships is designed for students who wish to develop their knowledge of public-private partnerships (PPPs) as part of their professional focus. The course provides an overview of Public-Private Partnerships (PPPs)what they are, how they are used to provide infrastructure assets and services, their benefits, and their pitfalls.			

G16E0401	Strategies of Entering New Markets	Z,ZK	3
The choice to internationalize; the various entry modes; impact of international activity on the business plan; the export plan; the marketing plan; the implementation; relations with partners; follow up and the results.			
32ME-P-SENM-01	Strategies of Entering New Markets	Z,ZK	3
The choice to internationalize; the various entry modes; impact of international activity on the business plan; the export plan; the marketing plan; the implementation; relations with partners; follow up and the results.			
G65C0201	Territorial Management Planning	ZK	3
32MC-P-ZRIB-01	Information Security Management and Implementation	ZK	3

Code of the group: PJM P 22/23 PVT
Name of the group: Povinně volitelné technické předměty, prezenční forma, Project management
Requirement credits in the group: In this group you have to gain at least 9 credits
Requirement courses in the group: In this group you have to complete at least 2 courses
Credits in the group: 9
Note on the group:

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
32MC-P-HVVT-01	**Technology Assessment** *Karel Mráček* ***Karel Mráček*** *Karel Mráček (Gar.)*	ZK	3	2P+0C		PV
G77C0001	**Technology Assessment** ***Karel Mráček***	ZK	3	2P+0C	Z,L	PV
32MC-P-KSYS-01	**Telecommunication Systems and Technologies** *Dušan Maga* ***Dušan Maga*** *Dušan Maga (Gar.)*	ZK	3	2P+0C		PV
G77C0007	**Communication Systems and Networks** ***Dušan Maga***	ZK	3	2P+0C		PV
127LAHE	**Landscape Heritage** *Jiří Kugl, Jiří Kupka, Pavel Holubec, Jan Hendrych* ***Jiří Kupka*** *Jan Hendrych (Gar.)*	ZK	4	3C	Z,L	PV
G16E0103	**Management in the Automotive Industry** ***Oldřich Bronec***	Z,ZK	6	2P+2C		PV
G16C1302	***Oldřich Bronec***	Z,ZK	6	2P+2C		PV
32MC-P-PRDO-01	**Transportation Engineering Projects** *Helena Bínová* ***Helena Bínová*** *Helena Bínová (Gar.)*	ZK	3	2P+0C		PV
G77C0003	**Transportation Engineering Projects** ***Helena Bínová***	ZK	3	2P+0C	Z,L	PV
32MC-P-IND4-01	**Industry 4.0** *Jan Mládek* ***Jan Mládek*** *Jan Mládek (Gar.)*	Z,ZK	3	1P+1C		PV
G77C2011	**Industry 4.0** ***Jan Mládek***	Z,ZK	3	1P+1C		PV
G51C0401		Z	3	2P+0C		PV
32MC-P-ROBO-01	**Robotics** *Lenka Vysloužilová, Olga Štěpánková* ***Lenka Vysloužilová*** *Olga Štěpánková (Gar.)*	ZK	6	2P+2C		PV
G77C0008	**Robotics** ***Olga Štěpánková***	Z,ZK	6	2P+2C		PV
G77C0004	**Smart Cities Technologies** ***Martin Maštálka***	ZK	3	2P+0C	Z,L	PV
32MC-P-SMCI-01	**Smart Cities Technologies** *Martin Maštálka* ***Martin Maštálka*** *Martin Maštálka (Gar.)*	ZK	3	2P+0C		PV
127UKKO	**Urban and Landscape Design** *Jiří Kupka, Zuzana Pešková, Ivan Vorel* ***Jiří Kupka*** *Zuzana Pešková (Gar.)*	ZK	3	2P	L	PV
127USRM	**Urban Structures and Urban Development** *Jiří Kugl, Jiří Kupka, Jan Mužík* ***Jan Mužík*** *Jan Mužík (Gar.)*	ZK	5	4P	Z	PV
32MC-P-ZRIB-01	**Information Security Management and Implementation** *Jaroslav Burčík* ***Jaroslav Burčík*** *Jaroslav Burčík (Gar.)*	ZK	3	2P+0C		PV

Characteristics of the courses of this group of Study Plan: Code=PJM P 22/23 PVT Name=Povinně volitelné technické předměty, prezenční forma, Project management

32MC-P-ZRIB-01	Information Security Management and Implementation	ZK	3
32MC-P-HVVT-01	Technology Assessment	ZK	3
G77C0001	Technology Assessment	ZK	3
32MC-P-KSYS-01	Telecommunication Systems and Technologies	ZK	3
Telecommunications: What does it all mean? We look into history and the future. We'll try it wired and wireless, even at the speed of light (or almost...), on land, underwater, and in space. For example: How is electric current created? Painter Morse. Alexander, ring the bell! Telecommunications from the plane. Do you know a Twisted Pair? How a landline works. How the telephone network becomes the Internet. Light and dark. Transmission of information by light. Why are networks "mobile"? 1G, 2G, 3G, 4G, 5G, etc. The more G, the better. How here and how elsewhere? Satellite systems (J. Kepler + A. C. Clarke = E. Musk). What do Saturn and Earth have in common? Does navigation know about me? We will walk around Čakovice. How television (including Internet) works. A football match and a drastic Clash of the Titans. WiFi not working? What now Why the Internet is not for people but for things. The biggest mistakes in the history of telco business. The subject scrupulously avoids formulas and mathematical relationships (however, it does not always succeed...) - the keywords are principles and clarity.			

G77C0007	Communication Systems and Networks	ZK	3
Telecommunications: What does it all mean? We look into history and the future. We'll try it wired and wireless, even at the speed of light (or almost...), on land, underwater, and in space. For example: How is electric current created? Painter Morse. Alexander, ring the bell! Telecommunications from the plane. Do you know a Twisted Pair? How a landline works. How the telephone network becomes the Internet. Light and dark. Transmission of information by light. Why are networks "mobile"? 1G, 2G, 3G, 4G, 5G, etc. The more G, the better. How here and how elsewhere? Satellite systems (J. Kepler + A. C. Clarke = E. Musk). What do Saturn and Earth have in common? Does navigation know about me? We will walk around Čakovice. How television (including Internet) works. A football match and a drastic Clash of the Titans. WiFi not working? What now Why the Internet is not for people but for things. The biggest mistakes in the history of telco business. The subject scrupulously avoids formulas and mathematical relationships (however, it does not always succeed...) - the keywords are principles and clarity.			
127LAHE	Landscape Heritage	ZK	4
Cultural, historical, natural, and ecological processes traditionally shape the human environment, our shared cultural landscape heritage. The course will reveal intrinsic values, functions, and character, and the appropriate conservation techniques and strategies for urban landscape heritage protection.			
G16E0103	Management in the Automotive Industry	Z,ZK	6
G16C1302		Z,ZK	6
32MC-P-PRDO-01	Transportation Engineering Projects	ZK	3
G77C0003	Transportation Engineering Projects	ZK	3
32MC-P-IND4-01	Industry 4.0	Z,ZK	3
I. Annotation The subject "Industry 4.0" deals with the topic of the fourth industrial revolution, explains concepts, terms and trends in this area. It deals with the history of industrial revolutions, current trends as well as individual technological breakthroughs that are typical for Industry 4.0. It analyzes the effects of "Industry 4.0" on the economy and society as a whole. Last but not least, it deals with the role of the state in the creation of economic and industrial policy, the need for which is generated by "Industry 4.0".			
G77C2011	Industry 4.0	Z,ZK	3
I. Annotation The subject "Industry 4.0" deals with the topic of the fourth industrial revolution, explains concepts, terms and trends in this area. It deals with the history of industrial revolutions, current trends as well as individual technological breakthroughs that are typical for Industry 4.0. It analyzes the effects of "Industry 4.0" on the economy and society as a whole. Last but not least, it deals with the role of the state in the creation of economic and industrial policy, the need for which is generated by "Industry 4.0".			
G51C0401		Z	3
32MC-P-ROBO-01	Robotics	ZK	6
The course explains the basic principles of robot operation, programming and construction, even to those who have no previous technical knowledge. In the introductory block, students will be introduced to the typical components of a robotic system and its construction, as well as the basics of programming. Then, participants will be offered the opportunity to verify their acquired knowledge by assembling a simple robot and using it to solve some characteristic tasks. The explanation draws attention not only to the results of various (and not only) technical fields on which robotics is based, and to the rich potential of using robots, but also to the limits of what a robot can do. Participants will also think together about ethical issues and the impacts of using robots.			
G77C0008	Robotics	Z,ZK	6
G77C0004	Smart Cities Technologies	ZK	3
The subject Technology for Smart Cities introduces students to the interdisciplinary problematics of smart cities and places it in the context of the technological, social and economic development of society.			
32MC-P-SMCI-01	Smart Cities Technologies	ZK	3
The course Technology for smart cities introduces students to the cross-cutting issues of so-called smart cities, the preparation of the Smart City concept and its planning and indicators.			
127UKKO	Urban and Landscape Design	ZK	3
The course introduces selected chapters from urban and landscape composition and the theory of urbanism as a basis for urban and landscape design (city image, city environment, perception, landscape composition, composed landscape, cultural landmarks, the phenomenon of the garden in the historical context, etc.). The aim of the course is a comprehensive view of urban and landscape design as a creation of the environment. A theoretical basis and a sound analysis of existing towns and landscapes are subsequently a prerequisite for successful practical design. This extends the content of the basic urban planning courses from the Bachelor's degree. Theoretical issues are complemented by examples from history and examples of various urban analyses. It focuses mainly on the development of the urban form of Prague, its selected districts (Dejvice, Karlín), aspects of their planning (regulatory commissions) and some specific issues (high-rise buildings). The basic set of lectures is complemented by several extension topics by invited external speakers.			
127USRM	Urban Structures and Urban Development	ZK	5
The course deals with the characteristic features of the city structure of the Czech Republic, individual types of human settlements, their importance in the structure and their urban structure and form. Students will learn to identify the characteristic features of cities and villages, their urban uniqueness, arrangement of spatial structure, functional composition and operational relationships. Analyze their external and internal image. To identify their landscape, urban and architectural values. Attention is also paid to the forms of urban development, i.e. both their overall growth and the regeneration or transformation of their existing parts. It also deals with the structure and composition of public areas of cities and landscapes, their transformations, and the protection of historical, cultural and urban values.			

List of courses of this pass:

Code	Name of the course	Completion	Credits
127CP11	City Planning 11	ZK	2
Concepts in urban space design in history, form of the city, typology of urban space, philosophies behind, practices of urban space design in European cultural context, land-use, planning controle, preservation of cities, urban ecology, trends and policies in urban planning and regional development.			
127LAHE	Landscape Heritage	ZK	4
Cultural, historical, natural, and ecological processes traditionally shape the human environment, our shared cultural landscape heritage. The course will reveal intrinsic values, functions, and character, and the appropriate conservation techniques and strategies for urban landscape heritage protection.			
127UKKO	Urban and Landscape Design	ZK	3
The course introduces selected chapters from urban and landscape composition and the theory of urbanism as a basis for urban and landscape design (city image, city environment, perception, landscape composition, composed landscape, cultural landmarks, the phenomenon of the garden in the historical context, etc.). The aim of the course is a comprehensive view of urban and landscape design as a creation of the environment. A theoretical basis and a sound analysis of existing towns and landscapes are subsequently a prerequisite for successful practical design. This extends the content of the basic urban planning courses from the Bachelor's degree. Theoretical issues are complemented by examples from history and examples of various urban analyses. It focuses mainly on the development of the urban form of Prague, its selected districts (Dejvice, Karlín), aspects of their planning (regulatory commissions) and some specific issues (high-rise buildings). The basic set of lectures is complemented by several extension topics by invited external speakers.			

127USRM	Urban Structures and Urban Development	ZK	5
The course deals with the characteristic features of the city structure of the Czech Republic, individual types of human settlements, their importance in the structure and their urban structure and form. Students will learn to identify the characteristic features of cities and villages, their urban uniqueness, arrangement of spatial structure, functional composition and operational relationships. Analyze their external and internal image. To identify their landscape, urban and architectural values. Attention is also paid to the forms of urban development, i.e. both their overall growth and the regeneration or transformation of their existing parts. It also deals with the structure and composition of public areas of cities and landscapes, their transformations, and the protection of historical, cultural and urban values.			
127XKRS	Landscape and Settlements	Z	2
The optional course presents selected chapters on landscape architecture and urbanism, focusing on two thematic blocks - garden art and settlements (urban and rural). It complements the series of compulsory and optional courses at Bachelor and Master level in Environmental Engineering and Architecture and Civil Engineering with various aspects, perspectives and complementary topics that were not covered in the compulsory and optional courses.			
32-IPW-6	International Project Workshop	ZK	6
32MC-P-DIPR-01	Diploma Thesis	Z	12
32MC-P-ENAR-01	Environmental Aspects of Regional Development	ZK	3
32MC-P-HVVT-01	Technology Assessment	ZK	3
32MC-P-IND4-01	Industry 4.0	Z,ZK	3
I. Annotation The subject "Industry 4.0" deals with the topic of the fourth industrial revolution, explains concepts, terms and trends in this area. It deals with the history of industrial revolutions, current trends as well as individual technological breakthroughs that are typical for Industry 4.0. It analyzes the effects of "Industry 4.0" on the economy and society as a whole. Last but not least, it deals with the role of the state in the creation of economic and industrial policy, the need for which is generated by "Industry 4.0".			
32MC-P-KSYS-01	Telecommunication Systems and Technologies	ZK	3
Telecommunications: What does it all mean? We look into history and the future. We'll try it wired and wireless, even at the speed of light (or almost...), on land, underwater, and in space. For example: How is electric current created? Painter Morse. Alexander, ring the bell! Telecommunications from the plane. Do you know a Twisted Pair? How a landline works. How the telephone network becomes the Internet. Light and dark. Transmission of information by light. Why are networks "mobile"? 1G, 2G, 3G, 4G, 5G, etc. The more G, the better. How here and how elsewhere? Satellite systems (J. Kepler + A. C. Clarke = E. Musk). What do Saturn and Earth have in common? Does navigation know about me? We will walk around Čakovice. How television (including Internet) works. A football match and a drastic Clash of the Titans. WiFi not working? What now Why the Internet is not for people but for things. The biggest mistakes in the history of telco business. The subject scrupulously avoids formulas and mathematical relationships (however, it does not always succeed...) - the keywords are principles and clarity.			
32MC-P-MACT-01	Macroeconomic Theory	ZK	3
32MC-P-OTIK-01	Reflections of Technical Innovations in Culture	ZK	3
The course is intended for students of the Master's study program Project Management of Innovations. The teaching is aimed at gaining a wide range of knowledge from the field of innovation processes, for the understanding and internalization of which a deep understanding of the connections between science and culture is an absolutely key.			
32MC-P-PRDO-01	Transportation Engineering Projects	ZK	3
32MC-P-PRIS-01	Information System Design	Z,ZK	6
Fundamental terms, information systems architecture, basic types of software applications for information system of enterprise, information system lifecycle, approaches to information system development, management information systems, web audit, business process modeling using BPMN, UML and others, information system modeling - UML and data modeling using ER diagrams			
32MC-P-PRX1-01	Internship	Z	6
The classification of the subject of professional practice is based on the decision of the MÚVS ČVUT during their studies to give students the opportunity to acquire quality skills and experience. MÚVS supports the establishment of a relationship between students and companies and emphasizes their mutual cooperation Part of the study plans is short-term professional internship of a pilot nature.			
32MC-P-RGIS-01	Regional Studies	ZK	3
32MC-P-RIIP-01	Innovation Management and Innovation Project	Z,ZK	6
Concepts of innovation, prerequisites and barriers to innovation, sources of innovation, strategic considerations of innovation, process innovation, product innovation, service innovation, a macroeconomic view of the role of innovation, organizational support and management of innovation, soft methods and techniques of innovation, systematic-analytical methods and techniques of innovation, economic aspects of innovation, intellectual property of innovation and legal aspects.			
32MC-P-ROAN-01	Decision Analysis	Z,ZK	6
The aim of the subject Decision Analysis is to acquaint students with the basic methods of decision-making in technical and economic, to use appropriate tools within decision-making processes.			
32MC-P-ROBO-01	Robotics	ZK	6
The course explains the basic principles of robot operation, programming and construction, even to those who have no previous technical knowledge. In the introductory block, students will be introduced to the typical components of a robotic system and its construction, as well as the basics of programming. Then, participants will be offered the opportunity to verify their acquired knowledge by assembling a simple robot and using it to solve some characteristic tasks. The explanation draws attention not only to the results of various (and not only) technical fields on which robotics is based, and to the rich potential of using robots, but also to the limits of what a robot can do. Participants will also think together about ethical issues and the impacts of using robots.			
32MC-P-SMCI-01	Smart Cities Technologies	ZK	3
The course Technology for smart cities introduces students to the cross-cutting issues of so-called smart cities, the preparation of the Smart City concept and its planning and indicators.			
32MC-P-SPOL-01	Public and Private Sector Collaboration	Z,ZK	3
The course on Public-Private Partnerships is designed for students who wish to develop their knowledge of public-private partnerships (PPPs) as part of their professional focus. The course provides an overview of Public-Private Partnerships (PPPs)what they are, how they are used to provide infrastructure assets and services, their benefits, and their pitfalls.			
32MC-P-STRR-01	Strategic Management	Z,ZK	6
The subject is focused on strategic planning and management, including the necessary contexts and links, as one of the main tools for long-term planning and direction of the organization as a whole or part of it (enterprise or institution of any type or even municipality, region or state). As part of teaching the subject, relevant case studies from practice will be used. In the center of attention are questions of competitiveness, competitive advantages, changes in the configuration of business processes and their influence on the process of integration of the Czech economy and Czech companies into global trade.			
32MC-P-SVRG-01	Social Relations in the Regions	Z,ZK	3
32MC-P-VLAD-01	Public Sector Governance	Z	3
32MC-P-ZRIB-01	Information Security Management and Implementation	ZK	3
32ME-P-6SIG-01	Six Sigma	ZK	3
32ME-P-ADFM-01	Advanced Topics in Financial Management	Z,ZK	3
This hands-on, applied course equips students with the main valuation models that are crucial tools for financial analysts. Key topics include reading and using financial statements, stock valuation using multiple techniques, and presenting financial market research. The course evolves from conceptual foundations to highly practical applications. Students will first			

master the main valuation models through problem sets and then apply these models in real-world scenarios using business case studies. Throughout the semester, we will discuss and present on global financial and economic news.

32ME-P-AGBC-01	Agile BootCamp	KZ	3

Agile Bootcamp course teaches students the fundamentals of Design Thinking and other agile innovation principles. The course introduces three methods that work well together within the same cross-functional team: Design Thinking, Lean Startup and Agile across teams. In the main part, it will offer the right tools and techniques for the design and implementation of Design Sprints, including a practical test of the entire process.

32ME-P-BPMN-01	Business Process Management	Z,ZK	6
32ME-P-CHIN-01	China's Innovations and Global Influence	ZK	3

The course provides an exploration of China's ability to combine dictatorship with technology innovations, and its growing global role including an impact on Europe. We will start with an introduction to China's political and economic system. That would give us the important basis for understanding Chinas technological innovations and rising global influence. We will discuss the role of technology in everyday life in China, how it impacts economy, but also how the government abuses technology to control people. In further detail, we will cover Chinas global role and how dependence on China might impact Europe. Last but not least, we will hypothesize on Chinas future development and its obstacles.

32ME-P-CLCH-01	Climate Change Causalities	Z,ZK	6

The course gives the students an overview of the links and relationships between adaptation, resiliency, and mitigation. In the field of state administration and self-government, industry and development, and the environment and processes associated with the preparation of investments, the students will be able to identify and evaluate appropriate basic measures and estimate the main adaptation processes and their difficulty for a given settlement or area. Students will get clear information about the processes and activities associated with the planning and implementation of adaptations and mitigations on a living basis, but also at the regional, national, and European level. The course focuses, among other things, on students' practical knowledge of the effects of climate change, so managers from practice will be invited to lessons or seminars.

32ME-P-ECCH-01	Economics of Climate Change	Z,ZK	6
32ME-P-EFNM-01	Economic and Financial Management	KZ	3

The course is organized in 2 seminars weekly, 3 credits. Analyzing and solving models of optimal allocation of assets, management of risk, and Portfolio allocation

32ME-P-ENIC-01	English for Intercultural Communication	Z,ZK	6

The seminar will focus on the importance of accuracy and comprehension in communication in a foreign language, and highlight cultural differences influencing communication, and examine the role of language means in intercultural negotiations. Outline of the subject: . Approaches to culture . Cultural and language context in communication . Intercultural theories and their influence on behaviour and language expression . International English as lingua franca . The most common mistakes as a cause of misunderstanding . Language practice and activities . Case studies on individual topics Language level: CEFR B2

32ME-P-EUPO-01	European Union and Regional Policy	ZK	3

The course discusses developments in the EU and in the EU Regional Policy from the end of the Cold War until today. It focuses on relevant issues of the integration process. It is based on lectures, class discussions and presentations of various positions present in the debates (group projects / own positions). The objectives of the course are to explain a modern development of the EU, analyse key points in particular areas of integration and practise argumentation skills.

32ME-P-FMRI-01	Financial Markets and Risk Management	Z,ZK	6

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 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 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 required. 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 the market value of the firms assets as compared 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 these models, while concentrating on their underlying economics and economic intuition. They learn to use market instruments and market analyses to design efficient investment and hedging strategies and methods for the company capital management hurled to financial markets.

32ME-P-LEAN-01	Lean Manufacturing	Z,ZK	6
32ME-P-MEPO-01	Monetary Economics and Policy	Z,ZK	6

This course provides the main concepts of monetary economics, emphasizing how monetary policy can affect the domestic economy. It consists of three major parts. The first part starts with a definition of money, its functions, and its measures in a form of monetary aggregates statistics compiled by central banks. It leads then to the inner workings of financial markets, particularly the interest rate dynamics of bonds and stocks. The second part focuses on a practical conduct of monetary policy. How money supply is created, what monetary policy tools affect the market interest rate, and how central banks can intervene in the foreign exchange market to regulate the exchange rate. The third part sheds light on the theoretical frameworks of money, aggregate demand-supply analysis based on a monetary policy curve, and channels through which the changes in policy interest rate transmit to the aggregate output and inflation. Nonconventional monetary policy during the global financial crisis of 2007-2009 when countries reached their zero-lower bound of interest rates is demonstrated too. For the case of Czech monetary policy, a guest speaker from the Czech National Bank will be invited to give his/her presentation and answer any specific questions, which may interest students in practice.

32ME-P-MINE-01	Management in International Environment	Z,ZK	3
32ME-P-MNEN-01	Meetings and Negotiations in English	Z,ZK	6

English for Meetings and Negotiations is part of a series of courses for follow-up students focused on functional language. The course is intended for students at the upper intermediate level. The course focuses on a collaborative model of the English language intended for a range of business or business meetings and negotiations. Although the course is not primarily focused on confrontational negotiation and communication strategies, part of the explanation is devoted to strategies and language for preventing and coping with confrontational situations. The course is based on the modern, increasingly widespread model of "International English", ie international English understood as lingua franca. Listening materials work with recordings of native speakers of all English styles and focus on collocations and idiomatics of American and British English.

32ME-P-PIMN-01	Innovation Project Management	Z,ZK	6

Successful innovation requires much more than the management of individual aspects of the innovation process within the institution; it also requires a systemic project approach that deals with the interactions between various stakeholders, their goals, objectives, markets, and organizations. Traditional innovation management usually focuses on goals and procedures for innovation planning, usually on implementation and control within the institution. Procedures are often repeated. This creates a framework that can limit project team members to working only within the set of rules and measures of the institution. However, most innovation projects require an individual approach so that project team members are highly flexible, innovative, and creative. Each innovation project is individual and requires an individual approach. A clear strategy in the area of innovation, a supportive corporate culture, a focus on the socio-ecological goals of innovation, constant study of trends and risks, an appropriate budget, Change- and Risk management, and adequate motivation for innovation are often the basic prerequisites for an innovation project. The main goal of this course is to acquaint students with the key specifics of innovation projects, Innovation management, the implementation and commercialization of innovations, and related intellectual property protection. After completing the course, the student should answer the following framework topics: how to identify and manage the framework of an innovation project, create a project breakdown structure, create a project innovation plan, create a project budget, define and allocate resources for innovation, manage project development, identify and manage innovation risks, and understand the sourcing process for the project. How to adequately protect intellectual property and how to implement and commercialise innovations. The course includes approaches, experience, and examples of the best innovative companies.

32ME-P-PTMN-01	Project Technology Management	Z,ZK	6

Technology project management means not only decisions about one's own technological research, innovative cooperation, or technology transfer. Technological innovations, especially in production, have long tied up company resources, and poor decisions can pose significant financial problems for most companies. Therefore, it is necessary to examine the preparatory,

	implementation, and commercial activities of technology management in a more comprehensive form. Technology project management is more goal-oriented, time-bound, and has a project organizational structure and budget. After completing the course, students should answer the following framework topics: define the nature, importance, and key functions of project technology management with a focus on the analysis of technological trends, risks, and opportunities, innovation radar, and technology assessment. Explain the relationships of business management to the development of the product, production, and service technologies. Characterize the process of technological forecasts, foresight, and creation of the technology strategy of the company. Explain creating a project plan for implementing new technology. Clarify the importance of the necessary protection of technological intellectual property and the need to commercialize their own technologies at the level of industry, region, or state.		
32ME-P-RDPL-01	Regional Development and Planning	Z,ZK	6
	The goal is to understand the reasons, missions and specifics of regional and municipal development in the context of European Union as well as Czech Republic, and of planning as a tool of development. Students should get familiar with the core European concepts of regional and municipal development; particular attention will be paid to the Middle-European planning culture rooted in the mutual interactions between spatial, urban, strategic and environmental planning. Students should perceive development from the perspectives of different stakeholders and professions, and understand the need of cooperation, participation and democracy in practice.		
32ME-P-SCOM-01	Social Competences in Project and Process Management	Z	3
	The course is focused on the development of skills in managing projects, processes, and people in the organization.		
32ME-P-SENM-01	Strategies of Entering New Markets	Z,ZK	3
	The choice to internationalize; the various entry modes; impact of international activity on the business plan; the export plan; the marketing plan; the implementation; relations with partners; follow up and the results.		
32ME-P-SMCR-01	Smart Cities and Regions	Z,ZK	6
	Smart Cities and Smart Regions study introduces students to the interdisciplinary issue Smart Cities, preparing concept SC and its planning and indicators.		
G00C3101	Diploma Thesis Project	Z	0
G00C4102	Diploma Thesis	Z	12
G00C4104	Practice	Z	6
	The classification of the subject of professional practice is based on the decision of the MÚVS ČVUT during their studies to give students the opportunity to acquire quality skills and experience. MÚVS supports the establishment of a relationship between students and companies and emphasizes their mutual cooperation Part of the study plans is short-term professional internship of a pilot nature.		
G04E0201	English for Intercultural Communication	Z,ZK	6
	The seminar will focus on the importance of accuracy and comprehension in communication in a foreign language, and highlight cultural differences influencing communication, and examine the role of language means in intercultural negotiations. Outline of the subject: . Approaches to culture . Cultural and language context in communication . Intercultural theories and their influence on behaviour and language expression . International English as lingua franca . The most common mistakes as a cause of misunderstanding . Language practice and activities . Case studies on individual topics Language level: CEFR B2		
G04E0202	Meetings and Negotiations in English	Z,ZK	6
	English for Meetings and Negotiations is part of a series of courses for follow-up students focused on functional language. The course is intended for students at the upper intermediate level. The course focuses on a collaborative model of the English language intended for a range of business or business meetings and negotiations. Although the course is not primarily focused on confrontational negotiation and communication strategies, part of the explanation is devoted to strategies and language for preventing and coping with confrontational situations. The course is based on the modern, increasingly widespread model of "International English", ie international English understood as lingua franca. Listening materials work with recordings of native speakers of all English styles and focus on collocations and idiomatics of American and British English.		
G16C0101	Balanced Scorecard	Z,ZK	6
G16C0104	Solving Real World Problems	ZK	3
	The aim of the course is to apply knowledge from the field of economics and management acquired during the study to solve real problems from economic practice. According to the client's assignment, students solve the problem with the support of teachers who become their mentors.		
G16C0201	Service Design	Z,ZK	3
G16C0301	Lean Management Practice	ZK	3
	The aim of the course is to apply knowledge from the field of lean management and lean manufacturing acquired during the study to solve real problems from economic practice. According to the client's assignment, student teams solve the problem with the support of teachers who become their mentors.		
G16C1201	Project Management	Z,ZK	6
G16C1302		Z,ZK	6
G16C1401	Innovation Marketing	Z,ZK	6
G16C2501	HR Management Systems	Z,ZK	6
	The course is focused on the development of managerial skills in managing people in the organization. Through lectures and seminars, students will learn effective strategies, policies and practices for efficient people management in the organization and the main tasks of managers in various activities of people management in the organization.		
G16C3101		Z,ZK	6
G16C3102	Innovation Management and Innovation Project	Z,ZK	6
	Concepts of innovation, prerequisites and barriers to innovation, sources of innovation, strategic considerations of innovation, process innovation, product innovation, service innovation, a macroeconomic view of the role of innovation, organizational support and management of innovation, soft methods and techniques of innovation, systematic-analytical methods and techniques of innovation, economic aspects of innovation, intellectual property of innovation and legal aspects.		
G16C3103		Z,ZK	6
G16E0102	Managing in an International Environment	Z,ZK	3
	The preparatory phase. Implementation: knowledge transfer and possible adaptations. Strategic partnership and consequences on the cooperation. Relations with other foreign stakeholders. The DFI and its constraints. Parent company versus locals. Managing multi-cultural teams. Remote management. Expatriation. Managerial skills and competences. Knowing oneself and developing ones competences.		
G16E0103	Management in the Automotive Industry	Z,ZK	6
G16E0202	Project Technology Management	Z,ZK	6
	Technology project management means not only decisions about one's own technological research, innovative cooperation, or technology transfer. Technological innovations, especially in production, have long tied up company resources, and poor decisions can pose significant financial problems for most companies. Therefore, it is necessary to examine the preparatory, implementation, and commercial activities of technology management in a more comprehensive form. Technology project management is more goal-oriented, time-bound, and has a project organizational structure and budget. After completing the course, students should answer the following framework topics: define the nature, importance, and key functions of project technology management with a focus on the analysis of technological trends, risks, and opportunities, innovation radar, and technology assessment. Explain the relationships of business management to the development of the product, production, and service technologies. Characterize the process of technological forecasts, foresight, and creation of the technology strategy of the company. Explain creating a project plan for implementing new technology. Clarify the importance of the necessary protection of technological intellectual property and the need to commercialize their own technologies at the level of industry, region, or state.		

G16E0203	Project Innovation Management	Z,ZK	6
Successful innovation requires much more than the management of individual aspects of the innovation process within the institution; it also requires a systemic project approach that deals with the interactions between various stakeholders, their goals, objectives, markets, and organizations. Traditional innovation management usually focuses on goals and procedures for innovation planning, usually on implementation and control within the institution. Procedures are often repeated. This creates a framework that can limit project team members to working only within the set of rules and measures of the institution. However, most innovation projects require an individual approach so that project team members are highly flexible, innovative, and creative. Each innovation project is individual and requires an individual approach. A clear strategy in the area of innovation, a supportive corporate culture, a focus on the socio-ecological goals of innovation, constant study of trends and risks, an appropriate budget, Change- and Risk management, and adequate motivation for innovation are often the basic prerequisites for an innovation project. The main goal of this course is to acquaint students with the key specifics of innovation projects, Innovation management, the implementation and commercialization of innovations, and related intellectual property protection. After completing the course, the student should answer the following framework topics: how to identify and manage the framework of an innovation project, create a project breakdown structure, create a project innovation plan, create a project budget, define and allocate resources for innovation, manage project development, identify and manage innovation risks, and understand the sourcing process for the project. How to adequately protect intellectual property and how to implement and commercialise innovations. The course includes approaches, experience, and examples of the best innovative companies.			
G16E0401	Strategies of Entering New Markets	Z,ZK	3
The choice to internationalize; the various entry modes; impact of international activity on the business plan; the export plan; the marketing plan; the implementation; relations with partners; follow up and the results.			
G16E0501	Social Competences in Project and Process Management	Z	3
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.			
G16E1302	Lean Manufacturing	Z,ZK	6
As a result of completing 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 of the company. Characterize pre-production, production, and manufacturing processes and related Lean manufacturing innovation processes. Create an innovation strategy and an innovation project with a focus on 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 beginning of the innovation process, innovative marketing should help identify new market opportunities and risks and improve the research of customer needs. During developing a new product, innovation marketing is to ensure the constant involvement of customers and users in this process. And at the end of the innovation process, innovation marketing ensures the successful introduction of a new product, technology, and service to the target audience. Innovation marketing should therefore be present at all stages of the innovation process to ensure that customer and market orientation is in line with advances in products and technologies, which often lead to the application of new marketing approaches. We address these main aspects in this subject.			
G16E2201	Modern Approaches in Project Management	Z,ZK	6
G16E2302	Business Process Management	Z,ZK	6
G16E3301	Six Sigma	ZK	3
The course is aimed at practical application of how the individual components (methods and techniques - mainly applied statistical methods and techniques) used in this approach and a common application of these components throughout the DMAIC cycle (Define, Measure, Analyze, Improve, Control).			
G51C0401		Z	3
G63C1102	Statistical Analysis	Z,ZK	6
The course builds on the introductory courses of statistics and prefaces slightly advanced statistical analysis methods.			
G63C1301	Corporate Financial Management	Z,ZK	6
The course provides a comprehensive view of building the essential aspects of financial management of business processes and projects. Students have the opportunity to understand the main concepts, tools and methods of financial management of processes and projects and their use in decision-making practice. Substantial emphasis is placed on evaluating the financial performance of the company, evaluation and valuation of tangible and financial investment projects, working capital management, methods of financing the company, project financing, methods of financial planning and forecasting, and valuation techniques.			
G63C2201	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.			
G63C2301	Controlling	Z,ZK	6
Controlling methods are presented from the initial detection of deviations to advanced models of managerial decision support in strategic horizons in the context and against the background of the management of basic business processes with an emphasis on the processes determining the effect of added value in the company's activities. The tasks of controlling are systematically explained according to the time perspective in the scope of corporate strategies and operational management, including the role of the controller in the individual phases of management from analysis to reporting. The content of the course is also focused on the presentation of methods and management tools that can be used to manage individual components (entities) in mutual interaction, especially in the area of cost management. Examples of models and case studies and tasks are used to present the key principles of controlling in the company.			
G63C2302	Financial Law	ZK	3
G63C3201		ZK	3
G63C4401	Information System Design	Z,ZK	6
Fundamental terms, information systems architecture, basic types of software applications for information system of enterprise, information system lifecycle, approaches to information system development, management information systems, web audit, business process modeling using BPMN, UML and others, information system modeling - UML and data modeling using ER diagrams			
G63E0201	Economics of Climate Change	Z,ZK	6
G63E0202	Green Transition	Z,ZK	6
Green transition is sometimes imagined as a technical question involving mostly energy production and industrial processes. Nonetheless, wider societal, economic and political contexts are indispensable to successful transformation. The course introduces different transition approaches focusing on such wider frameworks and stressing the interconnections between politics, markets, industry, and social changes. Theoretical concepts of transformation will then be linked to current reality in specific regions (with emphasis on but not limited to the EU).			
G63E2301	Financial Markets and Risk Management	Z,ZK	6
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 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 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 required. 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 the market value			

	of the firms assets as compared 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 these models, while concentrating on their underlying economics and economic intuition. They learn to use market instruments and market analyses to design efficient investment and hedging strategies and methods for the company capital management hurled to financial markets.		
G63E3301	Economic and Financial Modelling	KZ	3
	The course is organized in 2 seminars weekly, 3 credits. Analyzing and solving models of optimal allocation of assets, management of risk, and Portfolio allocation		
G63E4201	Monetary Economics and Policy	Z,ZK	6
	This course covers basic concepts from monetary economics, emphasizing how monetary policy can affect the domestic economy. It consists of two major parts. The first one starts with the definition of money, its functions, and monetary aggregates and leads to the inner workings of financial markets, particularly interest rate dynamics. The second one combines the practical conduct of monetary policy by central banks with the theoretical frameworks of what explains inflation in the long run and how monetary policy can stabilize the economy and inflation. The leading textbook is Mishkin (2022) listed with other optional readings below. There will be lectures and exercise sessions, where different problem sets based on lecture materials are solved together in class.		
G65C0103		Z,ZK	3
G65C0201	Territorial Management Planning	ZK	3
G65C0202	Environmental Aspects of Regional Development	ZK	3
G65E1301	Smart Cities and Regions	Z,ZK	6
	Smart Cities and Smart Regions study introduces students to the interdisciplinary issue Smart Cities, preparing concept SC and its planning and indicators.		
G65E2301	Regional Development and Planning	Z,ZK	6
	he goal is to understand the reason, mission and specifics of regional and municipal development in the context of European Union as well as Czech Republic, and of planning as a tool of development. Students should know the core European concepts of regional and municipal development. A particular attention will be paid to the Middle-European planning culture and planning system, which is rooted in the mutual interactions between spatial, urban, strategic and environmental planning. Students should perceive development from the perspectives of different stakeholders and professions, and understand the need of cooperation, participation and democracy in practice.		
G65E4101	European Union and Regional Policy	ZK	3
	The course discusses developments in the EU and in the EU Regional Policy from the end of the Cold War until today. It focuses on relevant issues of the integration process. It is based on lectures, class discussions and presentations of various positions present in the debates (group projects / own positions). The objectives of the course are to explain a modern development of the EU, analyse key points in particular areas of integration and practise argumentation skills.		
G66C0101	Reflections of Technical Innovations in Culture	ZK	3
	The subject is intended for students of the Master's study program Project Management of Innovations. The teaching is aimed at gaining a wide range of knowledge from the field of innovation processes, for the understanding and internalization of which a deep understanding of the connections between science and culture is an absolutely key.		
G77C0001	Technology Assessment	ZK	3
G77C0003	Transportation Engineering Projects	ZK	3
G77C0004	Smart Cities Technologies	ZK	3
	The subject Technology for Smart Cities introduces students to the interdisciplinary problematics of smart cities and places it in the context of the technological, social and economic development of society.		
G77C0007	Communication Systems and Networks	ZK	3
	Telecommunications: What does it all mean? We look into history and the future. We'll try it wired and wireless, even at the speed of light (or almost...), on land, underwater, and in space. For example: How is electric current created? Painter Morse. Alexander, ring the bell! Telecommunications from the plane. Do you know a Twisted Pair? How a landline works. How the telephone network becomes the Internet. Light and dark. Transmission of information by light. Why are networks "mobile"? 1G, 2G, 3G, 4G, 5G, etc. The more G, the better. How here and how elsewhere? Satellite systems (J. Kepler + A. C. Clarke = E. Musk). What do Saturn and Earth have in common? Does navigation know about me? We will walk around Čakovice. How television (including Internet) works. A football match and a drastic Clash of the Titans. WiFi not working? What now Why the Internet is not for people but for things. The biggest mistakes in the history of telco business. The subject scrupulously avoids formulas and mathematical relationships (however, it does not always succeed...) - the keywords are principles and clarity.		
G77C0008	Robotics	Z,ZK	6
G77C2011	Industry 4.0	Z,ZK	3
	I. Annotation The subject "Industry 4.0" deals with the topic of the fourth industrial revolution, explains concepts, terms and trends in this area. It deals with the history of industrial revolutions, current trends as well as individual technological breakthroughs that are typical for Industry 4.0. It analyzes the effects of "Industry 4.0" on the economy and society as a whole. Last but not least, it deals with the role of the state in the creation of economic and industrial policy, the need for which is generated by "Industry 4.0".		

For updated information see http://bilakniha.cvut.cz/en/FF.html
Generated: day 2025-08-09, time 00:32.