Study plan

Name of study plan: Electrical Engineering, Power Engineering and Management -Management of Power Eng. and Electr.

Faculty/Institute/Others: Faculty of Electrical Engineering Department: Branch of study guaranteed by the department: Welcome page Garantor of the study branch: Program of study: Electrical Engineering, Power Engineering and 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 in the program Minimal number of credits of the block: 61 The role of the block: P

Code of the group: 2018_MEEMDIP Name of the group: Diploma Thesis Requirement credits in the group: In this group you have to gain 25 credits Requirement courses in the group: In this group you have to complete 1 course Credits in the group: 25 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
BDIP25	Diploma Thesis	Z	25	22s	L	Р

Characteristics of the courses of this group of Study Plan: Code=2018_MEEMDIP Name=Diploma Thesis

BDIP25	Diploma Thesis	Z	25
Independent final comp	rehensive work for the Master's degree study programme. A student will choose a topic from a range of topics related to his	or her branch of s	tudy, which will
be specified by branch	department or branch departments. The diploma thesis will be defended in front of the board of examiners for the compreher	nsive final examination	ation.

Code of the group: 2018_MEEMH Name of the group: Humanities subjects Requirement credits in the group: In this group you have to gain 5 credits Requirement courses in the group: In this group you have to complete 1 course Credits in the group: 5 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
B0M16FIL	Peter Zamarovský Peter Zamarovský Peter Zamarovský (Gar.)	Z,ZK	5	2P+2S	Z,L	Р
B0M16HVT	History of science and technology 2 Marcela Efmertová, Jan Mikeš Marcela Efmertová Marcela Efmertová (Gar.)	Z,ZK	5	2P+2S	Z,L	Ρ
B0M16HSD1	History of economy and social studies Marcela Efmertová	Z,ZK	5	2P+2S	Z,L	Р
B0M16PSM	Psychology Jan Fiala Jan Fiala (Gar.)	Z,ZK	5	2P+2S	Z,L	Ρ
A003TV	Physical Education Ji í Drnek	Z	2	0+2	L,Z	Ρ
B0M16TEO	Theology Vladimír Sláme ka Vladimír Sláme ka Vladimír Sláme ka (Gar.)	Z,ZK	5	2P+2S	Z,L	Ρ

Characteristics of the courses of this group of Study Plan: Code=2018_MEEMH Name=Humanities subjects

B0M16FIL		Z,ZK	5
B0M16HVT	History of science and technology 2	Z,ZK	5
This subject traces	historical developments in electrical engineering branches in the world and in the Czech Lands. Its ultimate goal is to	stimulate students' interest in	h the history and
traditions of the sub	pject, while highlighting the developments in technical education and professional organizations, the process of shapir	ng scientific life and the influe	nce of technical
engineers			
B0M16HSD1	History of economy and social studies	Z,ZK	5
This subject deals w	with the bistomy of the Oesele environment in the 40th - 04th environment of the formation of the Oesele environment	astern the attack and a state of a	
This subject deals w	with the history of the Czech society in the 19th - 21th centuries. It follows the forming of the Czech political representation	ation, its aims and achieved r	esuits as well as
•	ral development and coexistence of the various ethnical groups in the Czech countries.	ation, its aims and achieved r	esuits as well as
•		Z,ZK	5
the social and cultur	ral development and coexistence of the various ethnical groups in the Czech countries.		5 2
the social and cultur B0M16PSM	Iral development and coexistence of the various ethnical groups in the Czech countries. Psychology		5 2 5 5
the social and cultur B0M16PSM A003TV B0M16TEO	Iral development and coexistence of the various ethnical groups in the Czech countries.	Z,ZK Z Z,ZK	5 2 5
the social and cultur B0M16PSM A003TV B0M16TEO This subject provide	Iral development and coexistence of the various ethnical groups in the Czech countries. Psychology Physical Education Theology	Z,ZK Z Z,ZK sophic lecture the basic theolo	5 2 5 ogic disciplines

Code of the group: 2018_MEEMP

Name of the group: Compulsory subjects of the programme Requirement credits in the group: In this group you have to gain 31 credits Requirement courses in the group: In this group you have to complete 6 courses Credits in the group: 31

Note on the aroup:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
B1M16EKE1	Economy of Power Industry Ji í Vaší ek, Old ich Starý, Tomáš Králík Tomáš Králík Old ich Starý (Gar.)	Z,ZK	5	2P+2C	L	Ρ
B1M15IAP	Engineering Applications Jan Kyncl Jan Kyncl (Gar.)	Z,ZK	5	2P+2C	Z	Ρ
B1M13JAS1	Quality and Reliability Pavel Mach, Denis Froš, Martin Molhanec Pavel Mach Pavel Mach (Gar.)	Z,ZK	6	2P+2C	Z	Ρ
B1MPROJ	Individual project Ji í Vaší ek, Old ich Starý, Jan Kyncl, Jan Jandera, Karel Künzel, Zden k Müller, Jaroslav Knápek, Iva Mrkvi ková, Josef ernohous, Josef ernohous Jan Jandera (Gar.)	Z	5	0p+4s	Z	Ρ
B1M15PPE1	Elements and Operation of Electrical Power Systems Zden k Müller, Ivo Doležel Zden k Müller (Gar.)	Z,ZK	5	2P+2S	Z	Ρ
B1M14SSE	Machinery and Structures of Power Plants Petr Ko árník, Ji í Šastný Petr Ko árník Petr Ko árník (Gar.)	Z,ZK	5	2P+2C	Z	Р

Characteristics of the courses of this group of Study Plan: Code-2018 MEEMP Name-Compulsory subjects of the programme

B1M16EKE1	Economy of Power Industry	Z,ZK	5
Fundamentals of fina	ncing of power companies. Cost structure of power generation and distribution. Prices and tariff systems for power, heat and g	as production and	distribution.
Examples of econon	ic evaluation and investment appraisal of the typical project in power sector. Renewable energy sources, externalities. Energy	policy and energy la	aw in CR.
Liberalization and po	wer market development.		
B1M15IAP	Engineering Applications	Z,ZK	5
B1M13JAS1	Quality and Reliability	Z,ZK	6
erminology and def	nitions from the area of quality and reliability and their control, philosophy of quality, systems of quality control in the world. Rel	liability as a part of	quality. Basic
51			1
	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty	pes of warm and c	old standbys.
Reliability of compor	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty ents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical m	pes of warm and c ethods and tools joi	old standbys. ined with quali
Reliability of compor	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty	pes of warm and c ethods and tools joi	old standbys. ined with quali
Reliability of compor control, managerial t	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty ents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical m	pes of warm and c ethods and tools joi	old standbys. ined with quali
Reliability of compor control, managerial t B1MPROJ	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty ents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical m pols for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits. Sta	vpes of warm and c ethods and tools joi atistical inspection.	old standbys. ined with quali
Reliability of compor control, managerial t B1MPROJ Independent work in	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty ents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical m bools for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits. Statistical project	vpes of warm and c ethods and tools joi atistical inspection.	old standbys. ined with quali
Reliability of compor control, managerial t B1MPROJ Independent work in subject.	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty ents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical m bools for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits. Statistical project	vpes of warm and c ethods and tools joi atistical inspection.	old standbys. ined with quali
Reliability of compor control, managerial t B1MPROJ	rea of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, ty ents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical m bools for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits. Statistical project the form of a project. A student will choose a topic from a list of topics specified by branch department. The project will be defe	rpes of warm and c ethods and tools joi atistical inspection. Z inded within the fram	old standbys. ined with quali 5 mework of a

Name of the block: Povinné p edm ty zam ení Minimal number of credits of the block: 44 The role of the block: PZ

Code of the group: 2018_MEEMPPS4 Name of the group: Compulsory subjects of the specialization Requirement credits in the group: In this group you have to gain 44 credits Requirement courses in the group: In this group you have to complete 9 courses Credits in the group: 44

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
B1M16EKL	Ecology and economy Jaroslav Knápek Jaroslav Knápek (Gar.)	Z,ZK	5	3P+1S	Z	PZ
B1M16EKM	Econometrics and economic applications Lubomír Lízal, Šerzod Tašpulatov Lubomír Lízal Lubomír Lízal (Gar.)	Z,ZK	4	2P+2S	L	PZ
B1M16EVE	Economics of Power Generation Martin Beneš Martin Beneš Martin Beneš (Gar.)	Z,ZK	5	2P+2S	L	PZ
B1M16FIM1	Financial Management Old ich Starý, Tomáš Králík, Július Bemš Tomáš Králík Old ich Starý (Gar.)	Z,ZK	5	2P+2S	L	PZ
B1M16FIU	Financial accounting Ji í Vaší ek, Július Bemš Július Bemš Ji í Vaší ek (Gar.)	Z,ZK	5	2P+2S	Z	PZ
B1M16MES	Management and Economics of Power Systems Old ich Starý, Tomáš Králík Tomáš Králík Old ich Starý (Gar.)	Z,ZK	5	2P+2S	Z	PZ
B1M16MNR	Managerial Decision Making Jaroslav Knápek, Martin Beneš Jaroslav Knápek Jaroslav Knápek (Gar.)	Z,ZK	5	2P+2C	Z	PZ
B1M16MAR	Marketing Ond ej Pešek Ond ej Pešek (Gar.)	Z,ZK	5	2P+2S	L	PZ
B1M16OVY	Operations Research Jaroslav Knápek, Martin Beneš Jaroslav Knápek Jaroslav Knápek (Gar.)	Z,ZK	5	2P+2C	L	PZ
-	ology and economy tal protection. Sustainable development. Global environmental problems and their asp	ects. Greenhouse	effect and o	1	Z,ZK nges. Fossil fue	5 els, nuclea
Development of environment uel cycle and environmenta economic instruments for ec 31M16EKM Ec distory of Econometrics, eco	tal protection. Sustainable development. Global environmental problems and their asp I impacts. Support schemes for renewable energy sources utilization. Economic effecti ionomic activities regulation. Externalities. Environmental indicators. onometrics and economic applications onometric models, input-output models, modelling of demand, time series models, prod	veness of renewa	ble energy s	climate char sources pro	nges. Fossil fue jects. Regulato Z,ZK	els, nuclear ory and 4
Development of environment uel cycle and environmenta acconomic instruments for ec B1M16EKM Ec distory of Econometrics, eco nodels, econometric analys B1M16EVE Ec	tal protection. Sustainable development. Global environmental problems and their asp I impacts. Support schemes for renewable energy sources utilization. Economic effecti conomic activities regulation. Externalities. Environmental indicators. onometrics and economic applications onometric models, input-output models, modelling of demand, time series models, pro- is of economic situation onomics of Power Generation	veness of renewa	ble energy s	climate char sources pro Z ssion mode	nges. Fossil fue jects. Regulato Z,ZK	els, nuclear ory and 4
Development of environment uel cycle and environmenta conomic instruments for ec 31M16EKM EC distory of Econometrics, eco nodels, econometric analys 31M16EVE EC Dower sources overview, en 31M16FIM1 Fir Principles of finance, preser	tal protection. Sustainable development. Global environmental problems and their aspi- l impacts. Support schemes for renewable energy sources utilization. Economic effecti- conomic activities regulation. Externalities. Environmental indicators. onometrics and economic applications onometric models, input-output models, modelling of demand, time series models, pro- is of economic situation onomics of Power Generation ergy processes analysis. hancial Management t value and alternative cost of capital, net present value, valuation of bonds and stocks	veness of renewa duction functions, s, investment deci	ble energy s	climate char sources pro ssion mode 2 2 2 1 2 4 present va	nges. Fossil fue jects. Regulato Z,ZK z,ZK Z,ZK alue, risk and a	els, nuclea any and 4 us equation 5 5 1ternative
Development of environment uel cycle and environmenta acconomic instruments for ec B1M16EKM EC History of Econometrics, econometric analys B1M16EVE EC Power sources overview, en B1M16FIM1 Fir Principles of finance, preser cost of capital, risk and retur B1M16FIU Fir Principles of accounting. Ass	tal protection. Sustainable development. Global environmental problems and their aspi- l impacts. Support schemes for renewable energy sources utilization. Economic effecti- conomic activities regulation. Externalities. Environmental indicators. onometrics and economic applications onometric models, input-output models, modelling of demand, time series models, pro- is of economic situation onomics of Power Generation ergy processes analysis. nancial Management	veness of renewa duction functions, s, investment deci nd application, he evenues and profit	ble energy s linear regre sion and ne dging, short	climate char sources pro ssion mode 2 2 4 present va t term finance 2 2 2 3 4 present va t tarm finance 2 2 4 present va t tarm finance	nges. Fossil fue jects. Regulato Z,ZK ils, simultaneou Z,ZK alue, risk and a ce, cash flow m Z,ZK inting. Balance	4 us equation 5 1ternative anagemen 5
Development of environmental conomic instruments for ecological and environmental conomic instruments for ecological and the seconometrics, ecological and the seconometric analys B1M16EKM Ecological and the seconometric analys B1M16EVE Ecological analys B1M16EVE Ecological analys B1M16FIM Fir Principles of finance, preser Stand return B1M16FIU Fir Principles of accounting. As: As: Idloss account. Cash flow Stan16MES M16MES Mathis course will give an over	tal protection. Sustainable development. Global environmental problems and their aspi- l impacts. Support schemes for renewable energy sources utilization. Economic effecti- conomic activities regulation. Externalities. Environmental indicators. onometrics and economic applications onometric models, input-output models, modelling of demand, time series models, pro- is of economic situation onomics of Power Generation ergy processes analysis. hancial Management tt value and alternative cost of capital, net present value, valuation of bonds and stocks n, lease or buy, taxes, inflation and return, financial and real options, option valuation a hancial accounting sets, inventory and financial investment book keeping. Debt and equity capital. Cost, re	veness of renewa duction functions, s, investment deci nd application, he evenues and profit ls. Auditing, consc ment. The course	ble energy s linear regre ision and ne idging, short . Tax system blidated state	climate char sources pro 2 ssion mode 2 t present va t term finance 1 and accou ements. Hel	rges. Fossil fue jects. Regulato Z,ZK ,ZK Z,ZK z,ZK z,ZK z,ZK z,ZK z,ZK	Als, nuclea ry and 4 us equation 5 1ternative tranagement 5 sheet, pro- 5
Development of environment acconomic instruments for eco 31M16EKM Eco distory of Econometrics, eco nodels, econometric analys 31M16EVE Eco ower sources overview, en 31M16FIM Fiin Principles of finance, preser ost of capital, risk and retur 31M16FIU Fiin Principles of accounting. Ass and loss account. Cash flow 31M16MES Ma his course will give an over letermination of prices and 31M16MNR Ma	tal protection. Sustainable development. Global environmental problems and their aspi- l impacts. Support schemes for renewable energy sources utilization. Economic effecti- conomic activities regulation. Externalities. Environmental indicators. onometrics and economic applications prometric models, input-output models, modelling of demand, time series models, pro- is of economic situation onomics of Power Generation ergy processes analysis. nancial Management tv value and alternative cost of capital, net present value, valuation of bonds and stocks n, lease or buy, taxes, inflation and return, financial and real options, option valuation a nancial accounting sets, inventory and financial investment book keeping. Debt and equity capital. Cost, re statement. Analysis of company's financial position. International accounting standard anagement and Economics of Power Systems view of the various aspects of power supply with special emphasis on power manager tariffs. Energy market principles and operational decision making are integral parts of anagerial Decision Making ion making, Decision models, Games theory, Decision making under uncertainty and r	veness of renewa duction functions, s, investment deci nd application, he evenues and profit ls. Auditing, consc ment. The course the course as wel	ble energy s linear regre ision and ne edging, short Tax system blidated state characterise I.	climate char sources pro 2 sssion mode 2 t present va t term finance 1 2 n and accou ements. Hel 2 ses energy co	nges. Fossil fue jects. Regulato Z,ZK dils, simultaneou Z,ZK alue, risk and a ce, cash flow m Z,ZK inting. Balance llo. Z,ZK sts and margi	Als, nucleal ry and 4 us equation 5 lternative hanagemen 5 sheet, pro- 5 nal costs fr 5

Name of the block: Compulsory elective courses Minimal number of credits of the block: 15 The role of the block: PV

Code of the group: 2018_MEEMPV2

Name of the group: Compulsory elective subjects of the specialization

Requirement credits in the group: In this group you have to gain at least 15 credits (at most 45) Requirement courses in the group: In this group you have to complete at least 3 courses (at most 9) Credits in the group: 15

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
B1M16CTR1	Controlling	Z,ZK	5	2P+2S	Z	PV

B1M16DES	Power Transport Systems Miroslav Vítek Miroslav Vítek (Gar.)	Z,ZK	5	2P+2S	Z	PV		
B1M16EUE1	Economy of Energy Use Ji í Beranovský Ji í Beranovský Ji í Beranovský (Gar.)	Z,ZK	5	2P+2S	L	PV		
B1M15ETT	Electrical Heat Jan Kyncl Jan Kyncl (Gar.)	Z,ZK	5	2P+2S	Z	PV		
B1M16ENI	Environmental Engineering Jan Mikeš Jan Mikeš Jan Mikeš (Gar.)	Z,ZK	5	2P+2S	Z,L	PV		
B1M16MAS1	Marketing Constantian							
B1M16RES	Development of Energy Systems Rostislav Krejcar Rostislav Krejcar (Gar.)	Z,ZK	5	2P+2S	Z	PV		
B1M16JAK	Quality management Jan Jandera	Z,ZK	5	2P+2S	Z	PV		
B1M16STA	Statistical methods in economics Šerzod Tašpulatov Šerzod Tašpulatov (Gar.)	Z,ZK	5	2P+2S	Z,L	PV		
The aim of the course is to p innovative changes by the a key role played by Project M which guarantee the compa	ontrolling present Management Control as a modern approach to Management of Enterprise, b pplication of Project Management principles. The focus is on the integrative potentia lanagement. Special attention is paid to technical-financial integration and its impact ny not merely to survive, but also to achieve high performance. The computerized m olled entities and used managerial tools.	I of Management Co t. The emphasis is or	ontrol in the n Project N	vity Based Ma Managemer Ianagement o	t of Enterpri	ise and on the processes,		
	-			7	71/	5		
	ower Transport Systems				,ZK	-		
	conomical aspects of design and operation of various technical systems for various e		road, railv	ay and ship t	ransport of s	solid and liquid		
fuel, district heating system	, cable car and convenyor belt transport for solid fuel and mainly grid for electricity (p	ower) transport.						
B1M16EUE1 Ed	conomy of Energy Use			Z	,ZK	5		
	anagement of company, buildings or energy systems. Energy need and consumptior	n, energy balance, E	nerav chai	acterization o	f aggregate.	secondarv		
	lit and feasibility study, optimization of energy management of energy systems. Price					,		
	ectrical Heat		,		,ZK	5		
	vironmental Engineering				,ZK	5		
The course focuses on dese	cribing the interdisciplinary relationships of living and non-living nature with electrical	I engineering. By inte	egrating el	ectrical engine	eering into c	lassical		
environmental practices, ne	w methods and techniques are being developed that either focus on predictive envir	onmental protection	from indus	strial influence	s or addres	s their		
consequences. The course	discusses both routinely used technologies as well as prototype and laboratory tech	nologies, mostly app	olicable to	nsitu remedia	tion. Inspira	tion from		
self-renewing natural proces	sses provides the ideal motivation and platform for developing and testing new innova	ative methods. The c	ourse is co	mplemented	by laborator	y work carried		
out at CTU, UCT, IMCH and	I selected excursions. Laboratory facilities have been created for the course at the Fl	EE CTU in Prague.						
	arketing Strategies	0		7	,ZK	5		
	0 0	The firm's hehevier				-		
	dge of marketing. The analysis of marketing strategies in different market situations.			inpention and	competitive	auvaniage.		
	product policy, price and condition policy, communication policy and distribution polic	;y.						
	evelopment of Energy Systems				,ZK	5		
	stions of power stations design is solved. This design is discussed from viewpoint of							
importance of classical and	renewable energy resources. These kinds of energy resources are considered as th	e most important fa	ctor of futu	re developme	nt of approp	riate power		
industry systems. The subje	ct provides overview of practical application of modern technologies to guarantee th	e development of er	nergetic sy	stems.				
B1M16JAK Q	uality management			7	,ZK	5		
	ent (QM), Current approaches to quality management, quality management system	(QMS) based on IS	O 9001. Pr					
	documents and records, Internal audits of QMS, Continual improvement of QMS, In			-				
	atistical mathada in acapamics			7	71	5		
	atistical methods in economics	toriation Manager	of your - bl		,ZK	-		
	series. Assortment. Distributions of frequencies. One-dimensional descriptive charac							
	basic characteristics. Interval estimates of basic characteristics. Hypothesis testing of					5		
Variable-structure indexs. M	ultifactor indexs . Correlation and regression, Basic Concepts. Measurement of depe	endence intensity. Ti	me series,	concepts, qui	alities. Chror	nological		
average . Time series - tren	ds and extrapolation.							
Nome of the black								
iname of the bloc	k: Elective courses							

Minimal number of credits of the block: 0 The role of the block: V

Code of the group: MTV Name of the group: Physical education Requirement credits in the group: Requirement courses in the group: Credits in the group: 0 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
TVV	Physical education	Z	0	0+2	Z,L	V
A003TV	Physical Education <i>Ji í Drnek</i>	Z	2	0+2	L,Z	V
TV-V1	Physical education	Z	1	0+2	Z,L	V
TVV0	Physical education	Z	0	0+2	Z,L	V
TVKLV	Physical Education Course	Z	0	7dní	L	V
TVKZV	Physical Education Course	Z	0	7dní	Z	V

Characteristics of the courses of this group of Study Plan: Code=MTV Name=Physical education

A003TV	Physical Education	Z	2
TVV	Physical education	Z	0
TV-V1	Physical education	Z	1
TVV0	Physical education	Z	0
TVKLV	Physical Education Course	Z	0
TVKZV	Physical Education Course	Z	0

Code of the group: 2018_MEEMVOL Name of the group: Elective subjects Requirement credits in the group: Requirement courses in the group: Credits in the group: 0 Note on the group:

~Nabídku volitelných předmětů uspořádaných podle kateder najdete na webových stránkách http://www.fel.cvut.cz/cz/education/volitelne-predmety.html\\

List of courses of this pass:

Code	Name of the course	Completion	Credits
A003TV	Physical Education	Z	2
B0M16FIL		Z,ZK	5
B0M16HSD1	History of economy and social studies	Z,ZK	5
This subject deals	with the history of the Czech society in the 19th - 21th centuries. It follows the forming of the Czech political representation, its aims a	and achieved result	is as well as
	the social and cultural development and coexistence of the various ethnical groups in the Czech countries.		
B0M16HVT	History of science and technology 2	Z,ZK	5
	historical developments in electrical engineering branches in the world and in the Czech Lands. Its ultimate goal is to stimulate studi		
traditions of the su	bject, while highlighting the developments in technical education and professional organizations, the process of shaping scientific life	and the influence	of technical
DOMAGDOM	engineers	7 71/	
B0M16PSM	Psychology	Z,ZK	5
B0M16TEO	Theology	Z,ZK	5
	des to students the basic orientation in christian theology and requires no special previous education. After short philosophic lecture	•	•
are gone through. T	The subject is determined not only to believer students who want to know the reliable theologic grounding but also above all to ones wh	o want to get know	Christianity
- DAMAG IA OA	- religion from which graws our civilization up.	7 71/	
B1M13JAS1	Quality and Reliability	Z,ZK	6
	definitions from the area of quality and reliability and their control, philosophy of quality, systems of quality control in the world. Reliab e area of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, type		
	ponents and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical metho		-
, ,	nagerial tools for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits		
B1M14SSE	Machinery and Structures of Power Plants	Z.ZK	5
The aim of the cour	se is to acquaint students with forms of energy transformation in power plants, describing the function of power facilities, their structure,	properties and cha	aracteristics.
B1M15ETT	Electrical Heat	Z,ZK	5
B1M15IAP	Engineering Applications	Z,ZK	5
B1M15PPE1	Elements and Operation of Electrical Power Systems	Z,ZK	5
B1M16CTR1	Controlling	Z,ZK	5
The aim of the cour	rse is to present Management Control as a modern approach to Management of Enterprise, based on the Process and Activity Based	d Management whi	ich supports
innovative changes	by the application of Project Management principles. The focus is on the integrative potential of Management Control in the Management	ment of Enterprise	and on the
	Project Management. Special attention is paid to technical-financial integration and its impact. The emphasis is on Project Manager		
which guarantee t	he company not merely to survive, but also to achieve high performance. The computerized models are used for presentation key pr	inciples, procedure	s and also
	key links between the controlled entities and used managerial tools.		

B1M16DES	Power Transport Systems	Z,ZK	5
The course is focus	ed on economical aspects of design and operation of various technical systems for various energy forms. That is road, railway and sh	hip transport of soli	d and liquid
fuel, district heating system, cable car and convenyor belt transport for solid fuel and mainly grid for electricity (power) transport.			
B1M16EKE1	Economy of Power Industry	Z,ZK	5
Fundamentals of	financing of power companies. Cost structure of power generation and distribution. Prices and tariff systems for power, heat and gas	production and di	stribution.
Examples of economic evaluation and investment appraisal of the typical project in power sector. Renewable energy sources, externalities. Energy policy and energy law in CR.			
	Liberalization and power market development.		
B1M16EKL	Ecology and economy	Z,ZK	5
	vironmental protection. Sustainable development. Global environmental problems and their aspects. Greenhouse effect and climate	-	
fuel cycle and environmental impacts. Support schemes for renewable energy sources utilization. Economic effectiveness of renewable energy sources projects. Regulatory and			
	economic instruments for economic activities regulation. Externalities. Environmental indicators.		
B1M16EKM	Econometrics and economic applications	Z,ZK	4
History of Econome	trics, econometric models, input-output models, modelling of demand, time series models, production functions, linear regression models	odels, simultaneou	s equations
	models, econometric analysis of economic situation		
B1M16ENI	Environmental Engineering	Z,ZK	5
	ses on describing the interdisciplinary relationships of living and non-living nature with electrical engineering. By integrating electrical		
environmental practices, new methods and techniques are being developed that either focus on predictive environmental protection from industrial influences or address their			
consequences. The course discusses both routinely used technologies as well as prototype and laboratory technologies, mostly applicable to insitu remediation. Inspiration from self-renewing natural processes provides the ideal motivation and platform for developing and testing new innovative methods. The course is complemented by laboratory work carried			
out at CTU, UCT, IMCH and selected excursions. Laboratory facilities have been created for the course at the FEE CTU in Prague.			
		-	5
B1M16EUE1	Economy of Energy Use	Z,ZK	-
-	energy management of company, buildings or energy systems. Energy need and consumption, energy balance. Energy characteriza sources. Energy audit and feasibility study, optimization of energy management of energy systems. Prices and tariffs, economy and		secondary
B1M16EVE Economics of Power Generation Z,ZK 5			
DAMAGENT	Power sources overview, energy processes analysis.	/	_
B1M16FIM1	Financial Management	Z,ZK	5
	ce, present value and alternative cost of capital, net present value, valuation of bonds and stocks, investment decision and net prese		
	and return, lease or buy, taxes, inflation and return, financial and real options, option valuation and application, hedging, short term fin		-
B1M16FIU	Financial accounting	Z,ZK	5
	nting. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and ac	-	sheet, profit
	s account. Cash flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated		_
B1M16JAK	Quality management	Z,ZK	5
	nanagement (QM), Current approaches to quality management, quality management system (QMS) based on ISO 9001, Process ma	-	
Metrology in QM, Control of documents and records, Internal audits of QMS, Continual improvement of QMS, Integrated management, Statistic methods in QM, Accreditation and certification			
		7 71/	-
B1M16MAR	Marketing ons of the marketing management. Marketing research and marketing information system. Concepts of marketing strategy. The use of		5 nd portfolio
	Marketing management. Marketing research and marketing information system. Concepts of marketing strategy. The use of Marketing-mix. Product and service policy, pricing and contractation policy, communication, distribution. Controlling and aud		na portiolio.
D1M16MAS1		Z,ZK	5
B1M16MAS1	Marketing Strategies ic knowledge of marketing. The analysis of marketing strategies in different market situations. The firm`s behaviour under competitior		
Broadening of bas	Case studies in the field of product policy, price and condition policy, communication policy and distribution policy.		auvaniaye.
B1M16MES Management and Economics of Power Systems Z,ZK 5			
	e an overview of the various aspects of power supply with special emphasis on power management. The course characterises energ		
	determination of prices and tariffs. Energy market principles and operational decision making are integral parts of the course as	, ,	
B1M16MNR	Managerial Decision Making	Z,ZK	5
	and decision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objective	· · ·	
Gystern approach	Expert systems, Cluster analysis		namming,
B1M16OVY	Operations Research	Z,ZK	5
	d elements of decision models, Linear programming, Transportation problem, Integer linear programming, Introduction to graphs the		
	Dynamic programming, Monte Carlo simulation, Project management (CPM, PERT).	ory, Norminear pro	granning,
B1M16RES	Development of Energy Systems	Z,ZK	5
	e basic questions of power stations design is solved. This design is discussed from viewpoint of ecology and level of used technolog		
	ssical and renewable energy resources. These kinds of energy resources are considered as the most important factor of future develo		
industry systems. The subject provides overview of practical application of modern technologies to guarantee the development of energetic systems.			
B1M16STA Statistical methods in economics Z,ZK 5			
	atistical series. Assortment. Distributions of frequencies. One-dimensional descriptive characteristics. Measures of variables, coefficie		-
	nates of basic characteristics. Interval estimates of basic characteristics. Hypothesis testing of basic characteristics. Individual indexs		
Variable-structure indexs. Multifactor indexs. Correlation and regression, Basic Concepts. Measurement of dependence intensity. Time series, concepts, qualities. Chronological			
average . Time series - trends and extrapolation.			
B1MPROJ	Individual project	Z	5
	in the form of a project. A student will choose a topic from a list of topics specified by branch department. The project will be defend		
subject.			
BDIP25	Diploma Thesis	Z	25
I I	comprehensive work for the Master's degree study programme. A student will choose a topic from a range of topics related to his or h	ner branch of study	
be specified by branch department or branch departments. The diploma thesis will be defended in front of the board of examiners for the comprehensive final examination.			
TV-V1	Physical education	Z	1
TVKLV	Physical Education Course	Z	0
TVKZV	Physical Education Course	Z	0
TVV	Physical Education	Z	0
TVV0		Z	
1000	Physical education	۷ ا	0

For updated information see <u>http://bilakniha.cvut.cz/en/f3.html</u> Generated: day 2025-06-28, time 23:37.