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 combined

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-K 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-K Name=Diploma Thesis

	BDIP25	Diploma Thesis	Z	25	
Independent final comprehensive 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 study, which			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 comprehen	sive final examina	ation	

Code of the group: 2018_MEEMH-K 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
BD0M16FIL	Philosophy 2	Z,ZK	5	14KP+6KS	L	Р
BD0M16HVT	History of science and technology 2	Z,ZK	5	14KP+6KS	L	Р
BD0M16PSM	Psychology Milana ížek Hrubá, Jaroslav Knápek Ji í Vaší ek Ji í Vaší ek (Gar.)	Z,ZK	5	14KP+6KS	Z,L	Р
BD0M16TEO	Theology	Z,ZK	5	14KP+6KS	L	Р

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

BD0M16FIL	Philosophy 2	Z,ZK	5
BD0M16HVT	History of science and technology 2	Z,ZK	5
This subject traces hist	rical developments in electrical engineering branches in the world and in the Czech Lands. Its ultimate goal is to stimulate s	tudente' interect in	the history and

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 the history and traditions of the subject, while highlighting the developments in technical education and professional organizations, the process of shaping scientific life and the influence of technical engineers

BD0M16PSM	Psychology	Z,ZK	5
BD0M16TEO	Theology	Z,ZK	5

This subject provides to students the basic orientation in christian theology and requires no special previous education. After short philosophic lecture the basic theologic disciplines are gone through. The subject is determined not only to believer students who want to know the reliable theologic grounding but also above all to ones who want to get know Christianity - religion from which graws our civilization up.

Code of the group: 2018_MEEMP-K

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 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
BD1M16EKE1	Economy of Power Industry Ji í Vaší ek, Old ich Starý, Tomáš Králík Tomáš Králík Old ich Starý (Gar.)	Z,ZK	5	14KP+6KC	L	Р
BD1M15IAP	Engineering Applications Jan Kyncl	Z,ZK	5	14KP+6KC	Z	Р
BD1M13JAS1	Quality and Reliability Pavel Mach, Martin Molhanec Pavel Mach Pavel Mach (Gar.)	Z,ZK	6	14KP+6KC	Z	Р
BD1MPROJ	Individual project Ji í Vaší ek, Miroslav Vítek, Josef ernohous, Zden k Müller, Stanislav Bou ek Old ich Starý Old ich Starý (Gar.)	Z	5	0p+4s	Z	Р
BD1M15PPE1	Elements and Operation of Electrical Power Systems Stanislav Bou ek, Jan Hlavá ek	Z,ZK	5	14KP+6KS	Z	Р
BD1M14SSE	Machinery and Structures of Power Plants Petr Ko árník Petr Ko árník (Gar.)	Z,ZK	5	14KP+6KC	Z	Р

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

BD1M16EKE1	Economy of Power Industry	Z,ZK	5
Fundamentals of financi	ng of power companies. Cost structure of power generation and distribution. Prices and tariff systems for power, heat and ga	s production and	distribution.
Examples of economic of	evaluation and investment appraisal of the typical project in power sector. Renewable energy sources, externalities. Energy p	olicy and energy I	aw in CR.
Liberalization and powe	r market development.		

BD1M15IAP	Engineering Applications	Z,ZK	5
BD1M13JAS1	Quality and Reliability	Z,ZK	6

Terminology and definitions from the area of quality and reliability and their control, philosophy of quality, systems of quality control in the world. Reliability as a part of quality. Basic definitions from the area of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, types of warm and cold standbys. Reliability of components and systems, calculation of reliability using composition and decomposition. and using a method of a list. Basic statistical methods and tools joined with quality control, managerial tools for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits. Statistical inspection.

BD1MPROJ	Individual project	Z	5
Independent work in the	e form of a project. A student will choose a topic from a list of topics specified by branch department. The project will be defer	ded within the fra	mework of a
subject.			

	Subject.			
	BD1M15PPE1	Elements and Operation of Electrical Power Systems	Z,ZK	5
	BD1M14SSE	Machinery and Structures of Power Plants	Z,ZK	5 5 s and characteristics.
== = = = = = = = = = = = =	d characteristics.			

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-K

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

Note on the group:

Specializace Management energetiky a elektrotechniky

rioto on the group		0 ,		,		
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
BD1M16EKL	Ecology and economy Jaroslav Knápek Jaroslav Knápek (Gar.)	Z,ZK	5	21KP+3KS	Z	PZ
BD1M16EKM	Econometrics and economic applications Šerzod Tašpulatov, Lubomír Lízal Lubomír Lízal (Gar.)	Z,ZK	4	14KP+6KS	L	PZ

BD1M16EVE	Economics of Power Generation	Z,ZK	5	14KP+6KS	L	PZ
BD1M16FIM1	Financial Management Old ich Starý, Július Bemš Old ich Starý Old ich Starý (Gar.)	Z,ZK	5	14KP+6KS	L	PZ
BD1M16FIU	Financial accounting Ji í Vaší ek	Z,ZK	5	14KP+6KS	Z	PZ
BD1M16MES	Management and Economics of Power Systems Old ich Starý, Tomáš Králík Tomáš Králík Old ich Starý (Gar.)	Z,ZK	5	14KP+6KS	Z	PZ
BD1M16MNR	Managerial Decision Making Jaroslav Knápek Jaroslav Knápek (Gar.)	Z,ZK	5	14KP+6KS	Z	PZ
BD1M16MAR	Marketing	Z,ZK	5	14KP+6KS	L	PZ
BD1M16OVY	Operations Research Jaroslav Knápek	Z,ZK	5	14KP+6KS	L	PZ

BD1M16EKL	Ecology and economy	Z.ZK	5
Development of environment	onmental protection. Sustainable development. Global environmental problems and their aspects. Greenhouse effect and clim	ate changes. Fossil	fuels, nuclear
fuel cycle and environ	mental impacts. Support schemes for renewable energy sources utilization. Economic effectiveness of renewable energy sou	rces projects. Regul	atory and
economic instruments	for economic activities regulation. Externalities. Environmental indicators.		
BD1M16EKM	Econometrics and economic applications	Z,ZK	4
History of Econometri	cs, econometric models, input-output models, modelling of demand, time series models, production functions, linear regressic	on models, simultan	eous equations
models, econometric	analysis of economic situation		
BD1M16EVE	Economics of Power Generation	Z,ZK	5
Power sources overvi	ew, energy processes analysis.		
BD1M16FIM1	Financial Management	Z,ZK	5
Principles of finance,	present value and alternative cost of capital, net present value, valuation of bonds and stocks, investment decision and net pr	esent value, risk and	d alternative
cost of capital, risk an	d return, lease or buy, taxes, inflation and return, financial and real options, option valuation and application, hedging, short ter	m finance, cash flow	v management.
cost of capital, risk an BD1M16FIU	d return, lease or buy, taxes, inflation and return, financial and real options, option valuation and application, hedging, short ter Financial accounting	m finance, cash flow	v management.
BD1M16FIU		Z,ZK	5
BD1M16FIU Principles of accounti	Financial accounting	Z,ZK	5
BD1M16FIU Principles of accounti	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system an	Z,ZK	5
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statements.	Z,ZK d accounting. Balan	5 ace sheet, profit
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement. Management and Economics of Power Systems	Z,ZK d accounting. Balan	5 ace sheet, profit
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement. Management and Economics of Power Systems on overview of the various aspects of power supply with special emphasis on power management. The course characterises e	Z,ZK d accounting. Balan	5 ace sheet, profit
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statemed Management and Economics of Power Systems on overview of the various aspects of power supply with special emphasis on power management. The course characterises es and tariffs. Energy market principles and operational decision making are integral parts of the course as well.	Z,ZK daccounting. Balan ents. Hello. Z,ZK nergy costs and ma	5 sice sheet, profit 5 sirginal costs for
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR System approach and	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement. Management and Economics of Power Systems In overview of the various aspects of power supply with special emphasis on power management. The course characterises eta and tariffs. Energy market principles and operational decision making are integral parts of the course as well. Managerial Decision Making I decision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objects.	Z,ZK daccounting. Balan ents. Hello. Z,ZK nergy costs and ma	5 sice sheet, profit 5 sirginal costs for
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR System approach and Expert systems, Clus	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement. Management and Economics of Power Systems In overview of the various aspects of power supply with special emphasis on power management. The course characterises eta and tariffs. Energy market principles and operational decision making are integral parts of the course as well. Managerial Decision Making I decision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objects.	Z,ZK daccounting. Balan ents. Hello. Z,ZK nergy costs and ma	5 sice sheet, profit 5 sirginal costs for
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR System approach and Expert systems, Clus BD1M16MAR	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement in the statement and Economics of Power Systems of overview of the various aspects of power supply with special emphasis on power management. The course characterises estand tariffs. Energy market principles and operational decision making are integral parts of the course as well. Managerial Decision Making Idecision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objecter analysis	Z,ZK da accounting. Balan ents. Hello. Z,ZK nergy costs and ma Z,ZK stives, Stochastic pro	5 since sheet, profit 5 singinal costs for 5 sogramming,
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR System approach and Expert systems, Clus BD1M16MAR The role and functions	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement of the various aspects of Power Systems on overview of the various aspects of power supply with special emphasis on power management. The course characterises estand tariffs. Energy market principles and operational decision making are integral parts of the course as well. Managerial Decision Making Idecision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objecter analysis Marketing	Z,ZK da accounting. Balan ents. Hello. Z,ZK nergy costs and ma Z,ZK stives, Stochastic pro	5 since sheet, profit 5 singinal costs for 5 sogramming,
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR System approach and Expert systems, Clus BD1M16MAR The role and functions Marketing-mix. Produ	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement in overview of the various aspects of power supply with special emphasis on power management. The course characterises estand tariffs. Energy market principles and operational decision making are integral parts of the course as well. Managerial Decision Making Idecision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objecter analysis Marketing International accounting and profit. Tax system and	Z,ZK da accounting. Balan ents. Hello. Z,ZK nergy costs and ma Z,ZK stives, Stochastic pro	5 since sheet, profit 5 singinal costs for 5 sogramming,
BD1M16FIU Principles of accounti and loss account. Cas BD1M16MES This course will give a determination of price BD1M16MNR System approach and Expert systems, Clus BD1M16MAR The role and functions Marketing-mix. Produ BD1M16OVY	Financial accounting ng. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated statement overview of the various aspects of power supply with special emphasis on power management. The course characterises eta and tariffs. Energy market principles and operational decision making are integral parts of the course as well. Managerial Decision Making Idecision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objecter analysis Marketing of the marketing management. Marketing research and marketing information system. Concepts of marketing strategy. The use and service policy, pricing and contractation policy, communication, distribution. Controlling and audit.	Z,ZK d accounting. Balanents. Hello. Z,ZK nergy costs and ma Z,ZK ctives, Stochastic pro Z,ZK se of product life cyc	5 since sheet, profit 5 singinal costs for 5 sogramming, 5 le and portfolio.

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-K

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
BD1M16CTR1	Controlling	Z,ZK	5	14KP+6KS	Z	PV
BD1M16DES	Power Transport Systems Miroslav Vítek Miroslav Vítek (Gar.)	Z,ZK	5	14KP+6KS	Z	PV
BD1M16EUE1	Economy of Energy Use Ji í Beranovský Ji í Beranovský (Gar.)	Z,ZK	5	14KP+6KS	L	PV
BD1M15ETT	Electrical Heat Jan Kyncl	Z,ZK	5	14KP+6KS	Z	PV
BD1M16ENI	Environmental Engineering	Z,ZK	5	14KP+6KS	Z,L	PV
BD1M16MAS1	Marketing Strategies	Z,ZK	5	14KP+6KS	Z,L	PV
BD1M16RES	Development of Energy Systems Rostislav Krejcar Rostislav Krejcar (Gar.)	Z,ZK	5	14KP+6KS	L	PV

BD1M16JAK	Quality management	Z,ZK	5	14KP+6KS	Z	PV
BD1M16STA	Statistical methods in economics Šerzod Tašpulatov	Z,ZK	5	14KP+6KC	L	PV

Characteristics of the courses of this group of Study Plan: Code=2018_MEEMPV2-K Name=Compulsory elective subjects of the specialization

BD1M16CTR1 Controlling Z,ZK 5

The aim of the course is to present Management Control as a modern approach to Management of Enterprise, based on the Process and Activity Based Management which supports innovative changes by the application of Project Management principles. The focus is on the integrative potential of Management Control in the Management of Enterprise and on the key role played by Project Management. Special attention is paid to technical-financial integration and its impact. The emphasis is on Project Management of innovation processes, which guarantee the company not merely to survive, but also to achieve high performance. The computerized models are used for presentation key principles, procedures and also key links between the controlled entities and used managerial tools.

BD1M16DES Power Transport Systems

Z,ZK

5

The course is focused on economical aspects of design and operation of various technical systems for various energy forms. That is road, railway and ship transport of solid and liquid fuel, district heating system, cable car and convenyor belt transport for solid fuel and mainly grid for electricity (power) transport.

BD1M16EUE1 | Economy of Energy Use

z,ZK

5

Organization and energy management of company, buildings or energy systems. Energy need and consumption, energy balance. Energy characterization of aggregate, secondary energy sources. Energy audit and feasibility study, optimization of energy management of energy systems. Prices and tariffs, economy and financial analysis.

BD1M15ETT	Electrical Heat	Z,ZK	5
BD1M16ENI	Environmental Engineering	Z.ZK	5

The course focuses on describing the interdisciplinary relationships of living and non-living nature with electrical engineering. By integrating electrical engineering into classical 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.

BD1M16MAS1 | Marketing Strategies

7K

5

Broadening of basic knowledge of marketing. The analysis of marketing strategies in different market situations. The firm's behaviour under competition and competitive advantage. Case studies in the field of product policy, price and condition policy, communication policy and distribution policy.

BD1M16RES Development of Energy Systems

Z,ZK

5

In this subject the basic questions of power stations design is solved. This design is discussed from viewpoint of ecology and level of used technology. Special focus is on future importance of classical and renewable energy resources. These kinds of energy resources are considered as the most important factor of future development of appropriate power industry systems. The subject provides overview of practical application of modern technologies to guarantee the development of energetic systems.

BD1M16JAK | Quality management

Z,ZK

5

History of quality management (QM), Current approaches to quality management, quality management system (QMS) based on ISO 9001, Process management, Quality planning, 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

BD1M16STA Statistical methods in economics

Z,ZK

5

Basic Concepts. Statistical series. Assortment. Distributions of frequencies. One-dimensional descriptive characteristics. Measures of variables, coefficient of excess. Points estimates of basic characteristics. Interval estimates of basic characteristics. Hypothesis testing of basic characteristics. Individual indexs number. Aggregative 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.

Name of the block: 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	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

TVV	Physical education	Z	0
A003TV	Physical Education	Z	2

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-K 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\\

Code	Name of the course	Completion	Credits
A003TV	Physical Education	Z	2
BD0M16FIL	Philosophy 2	Z,ZK	5
BD0M16HVT	History of science and technology 2	Z,ZK	5
	storical developments in electrical engineering branches in the world and in the Czech Lands. Its ultimate goal is to stimulate stude	•	history and
traditions of the subje	ect, while highlighting the developments in technical education and professional organizations, the process of shaping scientific life	and the influence	of technical
	engineers		
BD0M16PSM	Psychology	Z,ZK	5
BD0M16TEO	Theology	Z,ZK	5
This subject provides	to students the basic orientation in christian theology and requires no special previous education. After short philosophic lecture the	ne basic theologic	disciplines
are gone through. The	subject is determined not only to believer students who want to know the reliable theologic grounding but also above all to ones who	want to get know	Christianity
	- religion from which graws our civilization up.		
BD1M13JAS1	Quality and Reliability	Z,ZK	6
	initions from the area of quality and reliability and their control, philosophy of quality, systems of quality control in the world. Reliabi		-
	area of reliability, basic distributions used in reliability and their basic characteristics. Back-up using a warm and cold standby, types		-
	ents and systems, calculation of reliability using composition and decomposition, and using a method of a list. Basic statistical method	•	
	gerial tools for quality control. Techniques FMEA and QFFD, house of quality. Capability of a process. Taguchi loss function. Audits.		
BD1M14SSE	Machinery and Structures of Power Plants is to acquaint students with forms of energy transformation in power plants, describing the function of power facilities, their structure,	Z,ZK	5
		<u> </u>	
BD1M15ETT	Electrical Heat	Z,ZK	5
BD1M15IAP	Engineering Applications	Z,ZK	5
BD1M15PPE1	Elements and Operation of Electrical Power Systems	Z,ZK	5
BD1M16CTR1	Controlling	Z,ZK	5
	is to present Management Control as a modern approach to Management of Enterprise, based on the Process and Activity Based	_	
	y the application of Project Management principles. The focus is on the integrative potential of Management Control in the Manager roject Management. Special attention is paid to technical-financial integration and its impact. The emphasis is on Project Managem	•	
	company not merely to survive, but also to achieve high performance. The computerized models are used for presentation key prin		
milen gaarantee are	key links between the controlled entities and used managerial tools.	юргоо, р. ооочи. о	0 4.14 4.00
BD1M16DES	Power Transport Systems	Z.ZK	5
1	l on economical aspects of design and operation of various technical systems for various energy forms. That is road, railway and sh	,	
	fuel, district heating system, cable car and convenyor belt transport for solid fuel and mainly grid for electricity (power) transport	ort.	
BD1M16EKE1	Economy of Power Industry	Z,ZK	5
Fundamentals of fin	nancing 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 econo	omic evaluation and investment appraisal of the typical project in power sector. Renewable energy sources, externalities. Energy po Liberalization and power market development.	licy and energy la	w in CR.
BD1M16EKL	Ecology and economy	Z,ZK	5
	ronmental protection. Sustainable development. Global environmental problems and their aspects. Greenhouse effect and climate of	•	
fuel cycle and envi	ronmental impacts. Support schemes for renewable energy sources utilization. Economic effectiveness of renewable energy source economic instruments for economic activities regulation. Externalities. Environmental indicators.	es projects. Regula	atory and
BD1M16EKM	Econometrics and economic applications	Z,ZK	4
History of Econometri	cs, econometric models, input-output models, modelling of demand, time series models, production functions, linear regression models, econometric analysis of economic situation	dels, simultaneou	s equations
BD1M16ENI	Environmental Engineering	Z,ZK	5

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.

BD1M16EUE1	Economy of Energy Use	Z,ZK	5
-	energy management of company, buildings or energy systems. Energy need and consumption, energy balance. Energy characterizat sources. Energy audit and feasibility study, optimization of energy management of energy systems. Prices and tariffs, economy and f	ion of aggregate,	-
BD1M16EVE	Economics of Power Generation Power sources overview, energy processes analysis.	Z,ZK	5
BD1M16FIM1	Financial Management	Z,ZK	5
Principles of finar	ce, present value and alternative cost of capital, net present value, valuation of bonds and stocks, investment decision and net present	nt value, risk and	alternative
ost of capital, risk	and return, lease or buy, taxes, inflation and return, financial and real options, option valuation and application, hedging, short term fina	ance, cash flow n	nanagemen
BD1M16FIU	Financial accounting	Z,ZK	5
rinciples of accou	nting. Assets, inventory and financial investment book keeping. Debt and equity capital. Cost, revenues and profit. Tax system and acc	ounting. Balance	sheet, prof
and los	s account. Cash flow statement. Analysis of company's financial position. International accounting standards. Auditing, consolidated s	statements. Hello	•
BD1M16JAK	Quality management	Z,ZK	5
Metrology in QM,	nanagement (QM), Current approaches to quality management, quality management system (QMS) based on ISO 9001, Process ma Control of documents and records, Internal audits of QMS, Continual improvement of QMS, Integrated management, Statistic method certification	ds in QM, Accred	
BD1M16MAR	Marketing	Z,ZK	5
he role and function	ons of the marketing management. Marketing research and marketing information system. Concepts of marketing strategy. The use of providing the marketing management of the marketing management of the marketing management.	-	and portfolio
	Marketing-mix. Product and service policy, pricing and contractation policy, communication, distribution. Controlling and audi		
BD1M16MAS1	Marketing Strategies	Z,ZK	5
	ic knowledge of marketing. The analysis of marketing strategies in different market situations. The firm's behaviour under competition Case studies in the field of product policy, price and condition policy, communication policy and distribution policy.		advantage
BD1M16MES	Management and Economics of Power Systems	Z,ZK	5
his course will giv	e an overview of the various aspects of power supply with special emphasis on power management. The course characterises energy	_	inal costs fo
	determination of prices and tariffs. Energy market principles and operational decision making are integral parts of the course as		
BD1M16MNR	Managerial Decision Making	Z,ZK	5
System approach	and decision making, Decision models, Games theory, Decision making under uncertainty and risk, Decisions with multiple objective	s, Stochastic pro	gramming,
	Expert systems, Cluster analysis		
BD1M16OVY	Operations Research	Z,ZK	5
Art of modeling a	nd elements of decision models, Linear programming, Transportation problem, Integer linear programming, Introduction to graphs theo Dynamic programming, Monte Carlo simulation, Project management (CPM, PERT).	ory, Nonlinear pro	ogramming,
	Development of Energy Systems		
BD1M16RES	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 technology	•	1
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In this subject the importance of class	e basic questions of power stations design is solved. This design is discussed from viewpoint of ecology and level of used technology	. Special focus is pment of approp	on future riate power
In this subject th importance of clas inc	e basic questions of power stations design is solved. This design is discussed from viewpoint of ecology and level of used technology scical and renewable energy resources. These kinds of energy resources are considered as the most important factor of future development.	. Special focus is pment of approp	on future
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