Study plan

Name of study plan: 01 093 NSTI TZP 2012 základ

Faculty/Institute/Others: Department: Branch of study guaranteed by the department: Welcome page Garantor of the study branch: Program of study: Welcome page Type of study: unknown 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: 102 The role of the block: P

Code of the group: 12NS*1P-TZP Name of the group: 2012 NSTI 1.sem povinné TZP Requirement credits in the group: In this group you have to gain 29 credits Requirement courses in the group: In this group you have to complete 5 courses Credits in the group: 29 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
2371519	Means of Automatic Control I.	Z,ZK	6	3P+0C+2L	*	Р
2181136	Processing Equipments Design	Z,ZK	6	3P+2C	*	Р
2151026	Energy Sources and Conversions	Z,ZK	6	3P+2C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12NS*1P-TZP Name=2012 NSTI 1.sem povinné TZP

2371519 Means of Automatic Control I.

Various categories of means for automatic control according to the different criterions. Main features in each category. Air and hydraulic fluid as a medium for information transfer. Symbols and descriptions in pneumatic and hydraulic diagrams. Pneumatic control systems design. Pneumatic actuators, valves, special pneumatic, electropneumatic devices. Control valves, categories, dimensioning, design, applications. Inteligent pneumatics as an integration of pneumatic, electronic and control components and systems. Valve islands and terminals, standard, with industrial buses communication, programmable. Pneumatic positioning systems.

6

6

Z.ZK

2181136 Processing Equipments Design

Z,ZK PEs classification, their parameters and criteria of their rating. Ways of PEs design according their purpose and utilization. Materials used for PEs, welding, corrosion mechanisms and anticorrosion prevention. Dimension of shafts, beams, supports, pipes, heat exchangers and pressure vessels. Sealing and packing of fix parts (flanges) and moving parts (rotating shafts etc.). Practical examples of proper and improper designs of apparatuses. Example of heat exchanger design (heat transfer area calculation, its arrangement, head loss calculation, thermal dilatation, strength calculation, low cycle fatigue (thermal dilatation)). 2151026 Z.ZK **Energy Sources and Conversions** 6

Code of the group: 12NS*2P-TZP

Name of the group: 2012 NSTI 2.sem povinné TZP

Requirement credits in the group: In this group you have to gain 28 credits

Requirement courses in the group: In this group you have to complete 7 courses

Credits in the group: 28

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
2161083	Aerodynamics of Ventilation Martin Barták Martin Barták Martin Barták (Gar.)	Z,ZK	4	2P+1C	*	Р
2151164	Refrigeration Technique and Heat Pumps	Z,ZK	4	2P+1C	*	Р

2161112	Air Pollution Control Ji í Hemerka, Pavel Vybíral Pavel Vybíral (Gar.)	Z,ZK	4	2P+1C	*	Р
2163012	Project II. Vladimír Zmrhal	Z	5	0P+4C+0L	*	Р

Characteristics of the courses of this group of Study Plan: Code=12NS*2P-TZP Name=2012 NSTI 2.sem povinné TZP

2161083	Aerodynamics of Ventilation	Z,ZK	4		
Application of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoors or in ducts.					
2151164	Refrigeration Technique and Heat Pumps	Z,ZK	4		
2161112	Air Pollution Control	Z,ZK	4		
Fundamentals of the air	pollution control with the accent to methods of particulate matter and gaseous pollutants removal and propagation of polluta	ints in the atmosp	here.		
2163012	Project II.	Z	5		
Design of heating systems, heat distributors and systems for using recoverable source of energy. Design of ventilation and air conditioning systems, including gas cleaning and reduction					
of noise.					

Code of the group: 12NS*3P-TZP

Name of the group: 2012 NSTI 3.sem povinné TZP

Requirement credits in the group: In this group you have to gain 22 credits Requirement courses in the group: In this group you have to complete 5 courses Credits in the group: 22 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
2161079	Air-Conditioning Vladimír Zmrhal, Petr Zelenský Vladimír Zmrhal Vladimír Zmrhal (Gar.)	Z,ZK	4	2P+1C	*	Р
2163013	Project IV. Roman Vav i ka Vladimír Zmrhal Vladimír Zmrhal (Gar.)	Z	5	0P+5C	*	Р
2161051	Heat and Moisture Transfer in Environmental Engineering Martin Barták Martin Barták Martin Barták (Gar.)	Z,ZK	4	2P+1C	*	Р
2161102	Radiant and Industrial Heating Roman Vav i ka, Ji í Bašta Ji í Bašta Ji í Bašta (Gar.)	Z,ZK	4	2P+1C	*	Р

Characteristics of the courses of this group of Study Plan: Code=12NS*3P-TZP Name=2012 NSTI 3.sem povinné TZP

2161079	Air-Conditioning	Z,ZK	4				
Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems.							
2163013	Project IV.	Z	5				
Design of heating system	Design of heating systems, heat distributors and systems for using recoverable source of energy. Design of ventilation and air conditioning systems, including gas cleaning and reduction						
of noise.							
2161051	Heat and Moisture Transfer in Environmental Engineering	Z,ZK	4				
Application of heat and	mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture transfer.						
2161102	Radiant and Industrial Heating	Z,ZK	4				
Student will be informed about the basics of radiant and other industrial heating systems							

Code of the group: 12NS*4P-TZP Name of the group: 2012 NSTI 4.sem povinné TZP Requirement credits in the group: In this group you have to gain 23 credits Requirement courses in the group: In this group you have to complete 5 courses Credits in the group: 23 Note on the group:

Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their Code Completion Credits Scope Semester Role members) Tutors, authors and guarantors (gar.) **Control of HVAC Systems** * 2161087 Z,ZK 4 2P+1C Р Ji í Bašta, Jind ich Bohá Ji í Bašta Ji í Bašta (Gar.) Sanitary Installations Roman Vav i ka Roman Vav i ka Roman Vav i ka (Gar.) ΚZ * 2162056 3 2P+1C Ρ

Characteristics of the courses of this group of Study Plan: Code=12NS*4P-TZP Name=2012 NSTI 4.sem povinné TZP

2161087	Control of HVAC Systems	Z,ZK	4				
Application of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and sources of heat.							
2162056	Sanitary Installations	KZ	3				
Elaboration of project de	ocumentation in the stage of implementation project in the field of water supply, sewerage and gas consumption facilities. In t	he field of water s	upply focused				
on the design of public water supply connection, energy balance and design of heat source and accumulation for hot water preparation, design of circulation pipeline. In the field of							
sewerage, the elaboration of the gravity system for the drainage of wastewater from the object under consideration, the design of the sewerage connection and protection against rising							
water, the design of the recovery of rainwater. In the field of gas consumption facilities, design of the domestic gas pipeline, combustion air supply and flue gas exhaust.							

Name of the block: Compulsory elective courses Minimal number of credits of the block: 18 The role of the block: PV

Code of the group: 12N**3Q--JV Name of the group: 2012 N 3.sem povinná jazyková výuka Requirement credits in the group: In this group you have to gain 2 credits Requirement courses in the group: In this group you have to complete 1 course Credits in the group: 2

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
2043081	English - Preparatory Course / FME Veronika Kratochvílová, Eliška Vítková, Ilona Šimice, Michaela Schusová, Hana Volejníková Nina Procházková Ayyub	Z	2	0P+2C	*	PV
2043086	Czech - Preparatory Course Michaela Schusová, Hana Volejníková, Petr Laurich	Z	2	0P+2C	*	PV
2043083	French - Preparatory Course / FME Michaela Schusová, Dušana Jirovská Michaela Schusová Dušana Jirovská (Gar.)	Z	2	0P+2C	*	PV
2043082	German - Lower Intermediate Course Eliška Vítková, Michaela Schusová, Petr Laurich, Jaroslava Kommová Jaroslava Kommová Jaroslava Kommová (Gar.)	Z	2	0P+2C	*	PV
2043085	Russian - Preparatory Course / FME Michaela Schusová, Hana Volejníková, Dušana Jirovská Eliška Vítková	Z	2	0P+2C	*	PV
2043084	Spanish - Preparatory Course / FME Michaela Schusová, Jaime Andrés Villagómez Eliška Vítková	Z	2	0P+2C	*	PV

Characteristics of the courses of this group of Study Plan: Code=12N**3Q--JV Name=2012 N 3.sem povinná jazyková výuka

2043081	English - Preparatory Course / FME	Z	2			
Aim: Understanding clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about						
familiar topics. Reading	and comprehension of simple texts. Improvement of professional language. European level A1 - A2.					
2043086	Czech - Preparatory Course	Z	2			
Aim: Understanding cle	arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about the	m. Writing in a sir	nple way about			
familiar topics. Reading	and comprehension of simple texts. Improvement of professional language.					
2043083	French - Preparatory Course / FME	Z	2			
Aim: Understanding cle	arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about the	m. Writing in a sir	nple way about			
familiar topics. Reading	and comprehension of simple texts. Improvement of professional language.					
2043082	German - Lower Intermediate Course	Z	2			
Mapped to the level of C	common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations whic	h a student meets	s either at school			
or in his/her free time a	nd speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improveme	nt of professional	language.			
2043085	Russian - Preparatory Course / FME	Z	2			
Aim: Understanding cle	arly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about the	m. Writing in a sir	nple way about			
familiar topics. Reading and comprehension of simple texts. Improvement of professional language.						
2043084	Spanish - Preparatory Course / FME	Z	2			
Aim: Understanding clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them. Writing in a simple way about						
familiar topics. Reading	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.					

Code of the group: 12N**3Q--JZ

Name of the group: 2012 N 3.sem povinná jazyková zkouška

Requirement credits in the group: In this group you have to gain 1 credit

Requirement courses in the group: In this group you have to complete 1 course

Credits in the group: 1

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
2041081	English - Master Exam Veronika Kratochvílová, Eliška Vítková, Ilona Šimice, Michaela Schusová, Hana Volejníková, Michele Le Blanc, Nina Procházková Ayyub Nina Procházková Ayyub Ilona Šimice (Gar.)	ZK	1	0P+0C	*	PV
2041086	Czech- Master Exam Michaela Schusová, Hana Volejníková, Petr Laurich	ZK	1	0P+0C	*	PV

2041083	French - Master Exam / FME Michaela Schusová, Dušana Jirovská Dušana Jirovská (Gar.)	ZK	1	0P+0C	*	PV
2041082	German - Master Exam / FME Eliška Vítková, Michaela Schusová, Petr Laurich, Jaroslava Kommová Jaroslava Kommová Jaroslava Kommová (Gar.)	ZK	1	0P+0C	*	PV
2041085	Russian - Master Exam / FME Michaela Schusová, Hana Volejníková, Dušana Jirovská Eliška Vítková	ZK	1	0P+0C	*	PV
2041084	Spanish - Master Exam / FME Michaela Schusová, Jaime Andrés Villagómez Eliška Vítková Jaime Andrés Villagómez (Gar.)	ZK	1	0P+0C	*	PV

Characteristics of the courses of this group of Study Plan: Code=12N**3Q--JZ Name=2012 N 3.sem povinná jazyková zkouška

2041081	English - Master Exam	ZK	1			
Mapped to the level of C	Mapped to the level of Common European Framework of Reference: A2. Aim: Understanding clearly what is spoken about everyday situations which a student meets at school or in					
his/her free time and sp	eaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of	of professional lar	nguage.			
2041086	Czech- Master Exam	ZK	1			
2041083	French - Master Exam / FME	ZK	1			
Mapped to the level of C	common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations whic	h a student meets	either at school			
or in his/her free time ar	nd speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improveme	nt of professional	language.			
2041082	German - Master Exam / FME	ZK	1			
Mapped to the level of C	common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations whic	h a student meets	either at school			
or in his/her free time ar	nd speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improveme	nt of professional	language.			
2041085	Russian - Master Exam / FME	ZK	1			
Mapped to the level of C	common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations whic	h a student meets	either at school			
or in his/her free time ar	nd speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improveme	nt of professional	language.			
2041084	Spanish - Master Exam / FME	ZK	1			
Mapped to the level of Common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations which a student meets either at school						
or in his/her free time and speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improvement of professional language.						

Code of the group: 12NS*2Q-TZP Name of the group: 2012 NSTI 2.sem 1povvol TZP Requirement credits in the group: In this group you have to gain 3 credits Requirement courses in the group: In this group you have to complete 1 course Credits in the group: 3 Note on the group:

Code of the group: 12NS*3Q-TZP Name of the group: 2012 NSTI 3.sem 2povvol TZP Requirement credits in the group: In this group you have to gain 6 credits Requirement courses in the group: In this group you have to complete 2 courses Credits in the group: 6 Note on the group:

Code of the group: 12NS*4Q-TZP Name of the group: 2012 NSTI 4.sem 2povvol TZP Requirement credits in the group: In this group you have to gain 6 credits Requirement courses in the group: In this group you have to complete 2 courses Credits in the group: 6 Note on the group:

List of courses of this pass:

Code	Name of the course	Completion	Credits		
2041081	English - Master Exam	ZK	1		
Mapped to the level of Common European Framework of Reference: A2. Aim: Understanding clearly what is spoken about everyday situations which a student meets at school or in					
his/her free time and speaking about them. Writing in a simple way about familiar topics. Reading and comprehension of simple texts. Improvement of professional language.					

2044092	Cormon Master Even / EME	71/	1
	UCTIMAN - IVIASICE EXAMIN / FIVIE	∠N	
or in his/hor from	To common European Framework or Relefence A2 Am. Understanding clearly spoken anguage about everyoday situations which a	student meets eith	
	a me and speaking about mem. Writing in a simple way about familiar topics, reading and comprehension of simple texts, improvement		inguage.
2041083	French - Master Exam / FME	ZK	1
Mapped to the level	I of Common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations which a	student meets eith	er at school
or in his/her free	time and speaking about them. Writing in a simple way about familiar topics, reading and comprehesion of simple texts. Improvement	nt of professional la	anguage.
2041084	Spanish - Master Exam / FME	ZK	1
Mapped to the level	l of Common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations which a	student meets eith	er at school
or in his/her free	e time and speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improvemer	nt of professional la	anguage.
2041085	Russian - Master Exam / FME	ZK	1
Mapped to the level	of Common European Framework of Reference A2 Aim: Understanding clearly spoken language about everyday situations which a	student meets eith	er at school
or in his/her free	e time and speaking about them. Writing in a simple way about familiar topics. reading and comprehesion of simple texts. Improvemer	nt of professional la	anguage.
2041086	Czech- Master Exam	ZK	1
2043081	English - Preparatory Course / EME	7	2
Aim: Understandin	clearly what is snoken about everyday situations which a student meets at school or in his/her free time and speaking about them	<u> </u>	way about
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language European level A1 - A2)	, may about
2042082		7	2
Z04300Z	German European Francischer Scherzen 22 Aus-Understanding destu applien langunge obeut even uder eituntigen which a	ctudent meete eith	
or in his/hor from	To common European Framework or Relefence A2 Am. Understanding clearly spoken anguage about everyoday situations which a	student meets eith	
	a line and speaking about them. Writing in a simple way about raminar topics, reading and comprehension of simple texts, improvement		anguage.
2043083	French - Preparatory Course / FME		2
Aim: Understanding	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.	Writing in a simple	e way about
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.		
2043084	Spanish - Preparatory Course / FME	Z	2
Aim: Understanding	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.	Writing in a simple	e way about
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.		
2043085	Russian - Preparatory Course / FME	Z	2
Aim: Understandin	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.	Writing in a simple	way about
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.		
2043086	Czech - Preparatory Course	Z	2
Aim: Understandin	g clearly what is spoken about everyday situations which a student meets at school or in his/her free time and speaking about them.	Writing in a simple	e way about
	familiar topics. Reading and comprehension of simple texts. Improvement of professional language.	0 1	,
2151026	Energy Sources and Conversions	7 7K	6
2161020		7.71	4
ZIJI104			
0404054		2,2N	4
2161051	Heat and Moisture Transfer in Environmental Engineering	Z,ZK Z,ZK	4
2161051	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr	Z,ZK Z,ZK ansfer.	4
2161051 2161079	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning	Z,ZK Z,ZK ansfer. Z,ZK	4 4 4
2161051 2161079	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems.	Z,ZK Z,ZK ansfer. Z,ZK	4
2161051 2161079 2161083	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation	Z,ZK Z,ZK ansfer. Z,ZK	4 4 4 4
2161051 2161079 2161083 Apr	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoor	Z,ZK Z,ZK ansfer. Z,ZK Z,ZK ors or in ducts.	4
2161051 2161079 2161083 App 2161087	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK	4 4 4 4 4
2161051 2161079 2161083 App 2161087 Applic	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems ation of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK d sources of heat.	4 4 4 4 4
2161051 2161079 2161083 App 2161087 Applica 2161102	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems ation of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and Radiant and Industrial Heating	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK d sources of heat. Z,ZK	4 4 4 4 4
2161051 2161079 2161083 App 2161087 Applica 2161102	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems ation of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and Radiant and Industrial Heating Student will be informed about the basics of radiant and other industrial heating systems	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK d sources of heat. Z,ZK	4 4 4 4 4 4
2161051 2161079 2161083 App 2161087 Applica 2161102 2161112	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems ation of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and Radiant and Industrial Heating Student will be informed about the basics of radiant and other industrial heating systems	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK d sources of heat. Z,ZK	4 4 4 4 4 4
2161051 2161079 2161083 App 2161087 Applica 2161102 2161112 Fundamentals	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems ation of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and Radiant and Industrial Heating Student will be informed about the basics of radiant and other industrial heating systems Air Pollution Control s of the air pollution control with the accent to methods of particulate matter and passous pollutants removal and propagation of polle	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK d sources of heat. Z,ZK Z,ZK	4 4 4 4 4 4 4
2161051 2161079 2161083 App 2161087 Applica 2161102 2161112 Fundamentals 2162056	Heat and Moisture Transfer in Environmental Engineering Application of heat and mass transfer in environmental engineering. Solution tools for tasks concerned with heat and moisture tr Air-Conditioning Extend knowledge for design, control and evaluation of single-zone and multi-zone air conditioning systems. Aerodynamics of Ventilation plication of fluid mechanics principles in heating, ventilation and air-conditioning. Solution tools for problems concerning air flow indoo Control of HVAC Systems ation of basic approaches to automatic control of HVAC systems and equipment. Automatic control sequences of air conditioning and Radiant and Industrial Heating Student will be informed about the basics of radiant and other industrial heating systems Air Pollution Control s of the air pollution control with the accent to methods of particulate matter and gaseous pollutants removal and propagation of pollu	Z,ZK Z,ZK ansfer. Z,ZK ors or in ducts. Z,ZK d sources of heat. Z,ZK Z,ZK tants in the atmos	4 4 4 4 4 4 phere.
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