Attachment no. to Programme of Education

PROGRAMME OF STUDIES

1. Description

Number of semesters: 6	Number ECTS points necessary to obtain qualifications: 180
Prerequisites (particularly for second-level studies):	Upon completion of studies graduate obtains professional degree of: Bachelor of Science 1 st level qualifications
Possibility of continuing studies: second-level studies (Master level)	Graduate profile, employability: A graduate will be able to set up and organize an enterprise in any given organizational-legal form and formulate alternative solutions to typical problems regarding management and effectiveness within an organization and its individual functional groups. He/she will have the ability to identify, interpret and assess the behavior of employees and apply standard techniques of directing such behavior. He/she will cooperate and work effectively in organizational forms made up of groups and/or teams. He/she will be able to select and create simple software to solve common problems in management. These abilities qualify such a graduate for management positions in the following fields: production planning and organization, marketing, logistics, accounts, human resources, organization and management, as well as the implementation of computerized systems in management. A

graduate could also manage a small team of workers and, in particular, run their own enterprise.

Indicate connection with University's mission and its development strategy:

Courses in Management are carried out within the Faculty of Computer Science and Management at Wrocław University of Technology. Although, such a subject lies in the field of social science, it lies directly within the mission and development strategy of a technical university.

The educational program in Management is coherent with the mission of Wrocław University of Technology in the following areas:

- Developing creative, critical and tolerant graduates, as studying a course in management develops these traits;
- Aiming to provide high quality courses and providing the students of Management and lecturers of the Institute of Organization and Management with conditions enabling open discussion and constructive criticism;
- Developing the values and tradition of higher education, wide-ranging cooperation with other universities via students taking part in the Erasmus program and with employers via

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practical learning, carried out in the form of projects in specific organizations;

 Aiming to make an impact on the national and international scene in the area of educating specialists in the field of management.

The development plan of the department is in line with the strategy of the university as a whole. In particular, the department "...connects theoretical, research and specialist abilities with educational and teaching skills. The department is a leading research and teaching center in Poland and an important center on the international scene. Its teaching and research profile, together with the quality of the courses and research carried out in economics and technical science, ensures it an appropriately high position in national and international rankings". Teaching courses in management is one of the long standing elements in the department's development strategy. In accordance with the decisions made at Wrocław University of Technology, courses in management have an interdisciplinary nature. The program satisfies all the conditions stipulated in current legislation and is also in accordance with the National Educational Plan in the field of social science. In line with the university's strategy, in order to increase the attractiveness of our courses on the educational market, our programs in management

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have a unique character, since they make use of the natural - in business practice - complementarity of technical science and economics, enriched with the element of computer science. In accordance with the university's strategy and the department's development plan, which indicates the need for interaction with the region and its economy, the institute has created a framework which ensures that students have systematic contact with enterprises and other institutions during their studies.

In line with the university's development strategy, the quality of our courses is being improved in all aspects. This is achieved through the development of our lecturers' research and teaching skills, as well as systematic refurbishment of the department's infrastructure, including modernization of lecture theaters, audiovisual equipment and computer laboratories.

Graduates of our undergraduate studies in management are highly competitive on the employment market thanks to the specialist content of the program and the skills they develop through work practice. They are able to take up postgraduate studies and carry out basic research work.

2. Fields of science and scientific disciplines to which educational effects apply:

Area of Knowledge / Education: SOCIAL SCIENCES

Area of science: **ECONOMIC SCIENCES**

Scientific disciplines: MANAGAMENT SCIENCE, FINANCE, ECONOMICS

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3. Concise analysis of consistency between assumed educational effects and labour market needs

The educational goals of our undergraduate studies satisfy the following needs of employers on the job market:

- The need for employees to have interdisciplinary skills (small and medium-sized enterprises);
- The ability to work independently, but also cooperate with other employees to diagnose problems, as well as propose and implement solutions in specific functional groups within a firm (medium-sized and large enterprises);
- Openness to applying novel management methods and techniques, as well as tools from information technology;
- Flexibility and openness to innovations: entering new professions according to the website pracuj.pl e.g. analysts of investment processes, e-business specialists (e-marketers and e-architects), project management.

"Traditional" specialists in the field of marketing, finance, human resources, production management, logistics and IT are still in high demand on the employment market. However, they must be highly skilled, both technically and socially, in order to satisfy the demands of employers described above. Our program of undergraduate studies in Management, together with the experience of the teaching staff, create the conditions for students to develop these skills through their studies.

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4. List of education modules:

4.1. List of obligatory modules:

4.1.1 List of general education modules

4.1.1.1 *Liberal-managerial subjects* module (min. ..2.... ECTS points):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cour	ses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	PSZ1117W	Psychology	2					K1_ZARZ_W17	30	30	1	1,0	Т	Z			KO	Ob.
2	SCZ1109W	Sociology	2					K1_ZARZ_W17	30	30	1	1,0	Т	Z			KO	Ob.
		Total	4	0	0	0	0		60	60	2	2,0						

4.1.1.2 *Foreign languages* module (*min.* ...5...... *ECTS points*):

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	_	-	oup of cou	ses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	JZL	Foreign language B2.1		4				K1_ZARZ_U17 K1_ZARZ_U16	60	60	2	2,0	Т	Z	0	Р	КО	W
2	JZL	Foreign language B2.2		4				K1_ZARZ_U17 K1_ZARZ_U16	60	90	3	2,0	Т	Z	0	Р	КО	W
		Total	0	8	0	0	0		120	150	5	4,0						

4.1.1.3 *Sporting classes* module (min. ..1.. ECTS points):

No Course/group N	Name of course/group of courses	Weekly number of hours	Field-of-	Number of hours	Number of ECTS points	Form ² of	Way3 of	Course/group of courses

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	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	WFW	Sport activities		2					30	30	1	1,0	Т	Z	0	Р	KO	W
		Total	0	2	0	0	0		30	30	1	1,0						

4.1.1.4 *Information technologies* module (min. ..4.. ECTS points):

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Number	of hours	Numl	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	IEZ1146W	Information Technology	2					K1_ZARZ_W26	30	60	2	1,0	Т	Z			K	Ob.
2	IEZ1146L	Information Technology			1			K1_ZARZ_U12 K1_ZARZ_U15 K1_ZARZ_U17	15	60	2	0,5	Т	Z		Р	K	Ob.
		Total	2	0	1	0	0		45	120	4	1,5						

Altogether for general education modules

	Tota	l number of	hours		Total	Total	Total	Number of
					number	number	number	ECTS points
					of	of CNPS	of ECTS	for BK
					ZZU	hours	points	classes1
					hours			
lec	cl	lab	pr	sem				
6	10	1	0	0	255	360	12	8,5

4.1.2 List of basic sciences modules

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4.1.2.1 Mathematics module

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	_	U	oup of cou	rses	
	of courses code	(denote group of courses with symbol $\mathbf{G}\mathbf{K}$)	lec	cl	lab	pr	sem	study educational effect	ZZU	CNPS	total	BK classes ¹	of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
								symbol										
1	MAP8010	Mathematics 1 for Economists (GK)	2	2				K1_ZARZ_W23 K1_ZARZ_U15 K1_ZARZ_U14	60	270	9	2,0	Т	Е			PD	Ob.
2	MAZ1126W	Economical mathematics	2					K1_ZARZ_W03 K1_ZARZ_W23	30	120	4	1,0	Т	E			PD	Ob.
3	MAZ1126C	Economical mathematics		1				K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	Т	Z		Р	PD	Ob.
4	MAZ1127W	Descriptive Statistics	2					K1_ZARZ_W25	30	120	4	1,0	T	Е			PD	Ob.
5	MAZ1127C	Descriptive Statistics		1				K1_ZARZ_U15 K1_ZARZ_U14	15	60	2	0,5	Т	Z		Р	PD	Ob.
		Total	6	4	0	0	0		150	630	21	5,0						

4.1.2.2 Physics module

No.	. Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	FZZ1103W	Physics of Work Environment	1					K1_ZARZ_W22	15	30	1	0,5	Т	Z			PD	Ob.
2	FZZ1103C	Physics of Work Environment		1				K1_ZARZ_U06 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U13	15	30	1	0,5	Т	Z		Р	PD	Ob.
3	FZZ1103L	Physics of Work Environment			1			K1_ZARZ_U06 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U13	15	60	2	0,5	Т	Z		Р	PD	Ob.
		Total	1	1	1	0	0		45	120	4	1,5						

4.1.2.3 *Chemistry* module

No.	. Course/group	Name of course/group of courses	Week	ly num	ber of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cour	ses	
	of courses	(denote group of courses with	lec c	l lab	pr	sem	study educational	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
	code	symbol GK)					educational					of courses					

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				effect symbol					
 ·	Total								

Altogether for basic sciences modules:

	To	otal number o	of hours		Total number of ZZU hours	Total number of CNPS hours		Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
7	5	1	0	0	195	750	25	6,5

4.1.3 List of main-field-of-study modules

4.1.3.1 Obligatory main-field-of-study modules

No.	. Course/group	Name of course/group of courses	We	ekly r	numbe	r of i	hours	Field-of-	Number	of hours	Numb	er of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	FBZ3128W	Computer aided financial analysis	1					K1_ZARZ_W11 S1_ZARZ_ZP_W01	15	60	2	0,5	Т	Z			K	Ob
2	FBZ3128L	Computer aided financial analysis			1			K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U11 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U07 S1_ZARZ_U07	15	60	2	0,5	Т	Z		Р	К	Ob
3	ZMZ1229W	Marketing research	2					K1_ZARZ_W10 S1_ZARZ_ZP_W03	30	60	2	1,0	Т	Z			K	Ob
4	FBZ2110W	Corporate finance	2					K1_ZARZ_W11 S1_ZARZ_ZP_W01	30	90	3	1,0	Т	E			K	Ob

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5	FBZ2110C	Corporate finance		1			K1_ZARZ_U07 K1_ZARZ_U03 K1_ZARZ_U02 K1_ZARZ_U05 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U01 K1_ZARZ_U01 K1_ZARZ_U11 S1_ZARZ_ZP_U01	15	60	2	0,5	Т	Z	Р	К	Ob
6	IEZ3112W	Management Information Systems	2				K1_ZARZ_W24 K1_ZARZ_W26 S1_ZARZ_ZP_W06	30	120	4	1,0	Т	E		K	Ob
7	IEZ3112L	Management Information Systems			1		K1_ZARZ_U12 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 S1_ZARZ_ZP_U05	15	30	1	0,5	Т	Z	Р	K	Ob
8	ZMZ1230W	Logistics	1				K1_ZARZ_W09 K1_ZARZ_W14	15	30	1	0,5	Т	Z		K	Ob
9	ZMZ1230C	Logistics		1			K1_ZARZ_U11 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U02 K1_ZARZ_K01 K1_ZARZ_U13 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U07	15	30	1	0,5	Т	Z	Р	К	Ob
10	EKZ1125W	MACROECONOMICS	2				K1_ZARZ_W02 K1_ZARZ_W01 K1_ZARZ_W03	30	120	4	1,0	Т	Е		K	Ob
11	EKZ1125C	MACROECONOMICS		1			K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	Т	Z	Р	K	Ob
12	ZMZ2114W	Methods and Tools of Data Analysis	1				K1_ZARZ_W24 S1_ZARZ_ZP_W09	15	30	1	0,5	Т	Z		K	Ob
13	ZMZ2114L	Methods and Tools of Data Analysis			1		K1_ZARZ_K03 K1_ZARZ_K02 K1_ZARZ_U11 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 S1_ZARZ_ZP_U09	15	60	2	0,5	Т	Z	Р	K	Ob
14	ZMZ3129W	Organizational Methods and Techniques	1				K1_ZARZ_W07 K1_ZARZ_W21 K1_ZARZ_W16 S1_ZARZ_ZP_W10	15	30	1	0,5	Т	Z		K	Ob
15	ZMZ3129C	Organizational Methods and Techniques		1			K1_ZARZ_K02 K1_ZARZ_K06 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U01 K1_ZARZ_U01 K1_ZARZ_U01 K1_ZARZ_U01	15	30	1	0,5	Т	Z	Р	К	Ob

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16	EKZ1126W	MICROECONOMICS	2			K1_ZARZ_W01 K1_ZARZ_W02 K1_ZARZ_W03	30	120	4	1,0	Т	Е		K	Ob
17	EKZ1126C	MICROECONOMICS		2		K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U03	30	60	2	1,0	Т	Z	Р	К	Ob
18	ZMZ1117W	Organizational Science	2			K1_ZARZ_W05 K1_ZARZ_W09 K1_ZARZ_W06	30	60	2	1,0	Т	Z		K	Ob
19	ZMZ1117C	Organizational Science		1		K1_ZARZ_K01 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U01 K1_ZARZ_U02	15	30	1	0,5	Т	Z	Р	К	Ob
20	FBZ1148W	Basics of finance	2			K1_ZARZ_W11	30	60	2	1,0	Т	Z		K	Ob
21	ZMZ2113W	Basic marketing	2			K1_ZARZ_W09 K1_ZARZ_W10	30	120	4	1,0	Т	E		K	Ob
22	ZMZ2113C	Basic marketing		2		K1_ZARZ_U03 K1_ZARZ_U04 K1_ZARZ_K01 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U08 K1_ZARZ_U11 K1_ZARZ_U17 K1_ZARZ_U07	30	60	2	1,0	Т	Z	Р	К	Ob
23	ZMZ1116W	Fundamentals of Management	2			K1_ZARZ_W06 K1_ZARZ_W09 K1_ZARZ_W18 K1_ZARZ_W19 K1_ZARZ_W05 K1_ZARZ_W07 K1_ZARZ_W08	30	120	4	1,0	т	E		К	Ob
24	ZMZ1116C	Fundamentals of Management		2		K1_ZARZ_K01 K1_ZARZ_U03 K1_ZARZ_U01 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U02 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U08	30	60	2	1,0	Т	Z	Р	К	Ob
25	ZMZ1231D	Bachelor thesis			2	K1_ZARZ_U18 K1_ZARZ_U16 K1_ZARZ_U11 K1_ZARZ_K06 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U12 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K08 K1_ZARZ_K01 K1_ZARZ_K01 K1_ZARZ_K01 K1_ZARZ_K01 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U16	30	420	14	0,0	т	Z	Р	К	Ob
26	ZMZ1232Q	Internship (4th lub 5th semester)					0	150	5	0,0	Т	Z	Р	K	Ob

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27	PRZ1120W	Civil law and commercial law	2				K1_ZARZ_W03 K1_ZARZ_W04	30	60	2	1,0	Т	Z		K	Ob
28	PRZ1120C	Civil law and commercial law		1			K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U06	15	60	2	0,5	Т	Z	Р	K	Ob
29	FBZ2108W	Financial accounting	2				K1_ZARZ_W11 S1_ZARZ_ZP_W01	30	60	2	1,0	Т	Z		K	Ob
30	FBZ2108C	Financial accounting		1			K1_ZARZ_U06 K1_ZARZ_U03 K1_ZARZ_U04 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U11 K1_ZARZ_U07 K1_ZARZ_U07 K1_ZARZ_U02 S1_ZARZ_ZP_U01	15	60	2	0,5	Т	Z	Р	К	Ob
31	ZMZ3206S	Diploma seminar				1	K1_ZARZ_K08 K1_ZARZ_U14 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	30	1	0,5	Т	Z	Р	К	Ob
34	ZMZ3133L	Management Training			2		K1_ZARZ_U05 K1_ZARZ_K08 K1_ZARZ_K03 K1_ZARZ_K03 K1_ZARZ_U11 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07 S1_ZARZ_U07	30	60	2	1,0	Т	Z	Р	К	Ob
35	SCZ2102W	Organizational Behaviour	2				K1_ZARZ_W18	30	60	2	1,0	Т	Z		K	Ob
36	SCZ2102C	Organizational Behaviour		1			K1_ZARZ_K09 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K02 K1_ZARZ_K06 K1_ZARZ_K04 K1_ZARZ_U09 K1_ZARZ_U109	15	60	2	0,5	Т	Z	Р	К	Ob
37	FBZ3108W	Financial Management	2				K1_ZARZ_W09 K1_ZARZ_W11 S1_ZARZ_ZP_W01 S1_ZARZ_ZP_W09	30	60	2	1,0	Т	Z		K	Ob
38	FBZ3108C	Financial Management		1			K1_ZARZ_U02 K1_ZARZ_K01 K1_ZARZ_U04 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U07 S1_ZARZ_ZP_U00 S1_ZARZ_ZP_U09	15	30	1	0,5	Т	Z	Р	К	Ob
39	ZMZ1233W	Quality management	2				K1_ZARZ_W15 S1_ZARZ_ZP_W05	30	90	3	1,0	Т	E		K	Ob

 $^{^{1}}$ BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students 2 Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

40	ZMZ1233C	Quality management		2			K1_ZARZ_U02 K1_ZARZ_K01 K1_ZARZ_U03 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07 K1_ZARZ_U06 S1_ZARZ_U06	30	60	2	1,0	Т	Z	Р	К	Ob
41	ZMZ1241W	Marketing Management	1				K1_ZARZ_W10	15	30	1	0,5	Т	Z		K	Ob
42	ZMZ1241C	Marketing Management		1			K1_ZARZ_U11 K1_ZARZ_U03 K1_ZARZ_K01 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U05 K1_ZARZ_U07 K1_ZARZ_U02 K1_ZARZ_U02	15	30	1	0,5	Т	Z	Р	К	Ob
43	ZMZ3177W	Personnel Management	2				K1_ZARZ_W09 K1_ZARZ_W12 S1_ZARZ_ZP_W04	30	60	2	1,0	Т	Z		K	Ob
44	ZMZ3177C	Personnel Management		2			K1_ZARZ_U04 K1_ZARZ_K04 K1_ZARZ_K01 K1_ZARZ_K01 K1_ZARZ_U03 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07 S1_ZARZ_U07	30	60	2	1,0	Т	Z	Р	К	Ob
45	ZMZ1234W	Processes Management	2				K1_ZARZ_W09 K1_ZARZ_W16	30	60	2	1,0	Т	Z		K	Ob
46	ZMZ1235W	Operations Management	1				K1_ZARZ_W09 K1_ZARZ_W13	15	60	2	0,5	Т	Е		K	Ob
47	ZMZ1235C	Operations Management		1			K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_U03 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U07 K1_ZARZ_U07 K1_ZARZ_U08	15	30	1	0,5	Т	Z	Р	К	Ob
48	ZMZ1235L	Operations Management			1		K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_U03 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07 K1_ZARZ_U07 K1_ZARZ_U08	15	30	1	0,5	Т	Z	Р	К	Ob
49	ZMZ1236W	Project Management	2				K1_ZARZ_W18 K1_ZARZ_W20	30	90	3	1,0	Т	E		K	Ob

 $^{^{1}}$ BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students 2 Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

50	ZMZ1236C	Project Management		1				K1_ZARZ_K06 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U07 K1_ZARZ_U07 K1_ZARZ_U10 K1_ZARZ_U10 K1_ZARZ_U10 K1_ZARZ_U09 K1_ZARZ_U09	15	60	2	0,5	т	Z	Р	К	Ob
		Total	40	22	6	2	1		1065	3330	111	34,5					

4.1.3.2 module

No.	. Course/group	Name of course/group of courses					hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Total								·								

Altogether (for main-field-of-study modules):

	Tota	al number of	hours		Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
40	22	6	2	1	1065	3330	111	34,5

4.2 List of optional modules

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

4.2.1 List of general education modules

4.2.1.1 Liberal-managerial subjects modules (min. ..3.... ECTS points):

No.	Course/group	Name of course/group of courses	We	ekly	lab pr sem stud- education effect			Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of	-	Ç	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1		Social competences module					2	S1_ZARZ_ZP_U11	30	90	3	1,0	Т	Z		Р	KO	W
		Total	0	0	0	0	2		30	90	3	1,0						

Social competences module

No	Course/group	Name of course/group of courses	We	ekly	numb	er of 1	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way ³ of	Course/gr	roup of cou	rses	
	of courses	(denote group of courses with	lec	cl	lab	pr	sem	study	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
	code	symbol GK)						educational effect					of courses					
								symbol										
1	PSZ1142S	Effective teamwork					2	K1_ZARZ_U18 K1_ZARZ_K08 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K06 K1_ZARZ_K05 K1_ZARZ_K04 K1_ZARZ_K04 K1_ZARZ_U10 K1_ZARZ_K03 K1_ZARZ_K03	30	90	3	1,0	Т	Z		Р	КО	W
2	PSZ1143S	Interpersonal communication					2	K1_ZARZ_U18 K1_ZARZ_K08 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K06 K1_ZARZ_K06 K1_ZARZ_K04 K1_ZARZ_K04 K1_ZARZ_K03 K1_ZARZ_K03 K1_ZARZ_K02	30	90	3	1,0	Т	Z		Р	КО	W
3	PSZ1144S	Negotiation and conflict resolving					2	K1_ZARZ_U18 K1_ZARZ_K08 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	30	90	3	1,0	Т	Z		Р	КО	W

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

					K1_ZARZ_K06 K1_ZARZ_K05 K1_ZARZ_K04 K1_ZARZ_U10 K1_ZARZ_K03 K1_ZARZ_K02									
4	PSZ1145S	Tools of public examinations		2	K1_ZARZ_U18 K1_ZARZ_U18 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K06 K1_ZARZ_K05 K1_ZARZ_K05 K1_ZARZ_K01 K1_ZARZ_K01 K1_ZARZ_K03 K1_ZARZ_K03	30	90	3	1,0	Т	Z	Р	ко	W
		Total												

4.2.1.2 Foreign languages module (min. ECTS points):

No	Course/group	Name of course/group of courses	We	ekly	_ `		hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way ³ of	Course/or	oup of cou	rses	
No.	of courses code	(denote group of courses with symbol GK)		<u> </u>		_	sem	study educational effect symbol	ZZU	CNPS	total		course/group of courses			practical ⁵		type ⁷
		Total																

4.2.1.3 Sporting classes module (*min. ECTS points*):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	ber of ECTS points	Form ² of	Way3 of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem) ⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Total										
	_	Total								

4.2.1.4 *Information technologies* module (min. ECTS points):

No.	. Course/group		We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Num	ber of ECTS points	Form ² of	-	O .	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Total																

Altogether for general education modules:

	То	otal number o	of hours		Total number of ZZU hours	Total number of CNPS hours		Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
0	0	0	0	2	30	90	3	1,0

4.2.2 List of basic sciences modules

4.2.2.1 *Mathematics* module (min. ECTS points):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
								symbol										

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

	Total								

4.2.2.2 *Physics* module (min. ECTS points):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of			oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes 1	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Total																

4.2.2.3 *Chemistry* **module** (*min.* *ECTS points*):

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of			oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Total																

Altogether for basic sciences modules:

Total number of hours	Total	Total	Total	Number of
	number	number	number	ECTS points
	of	of CNPS	of ECTS	for BK
	ZZU	hours	points	classes1

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

			hours			
l lab	pr	sem				
1	lab	lab pr	lab pr sem	lab pr sem	lab pr sem	lab pr sem

4.2.3 List of main-field-of-study modules

4.2.3.1 **module** (*min.* *ECTS points*):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of			oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Total																

Altogether for main-field-of-study modules:

				0			· ·	
		To	otal number o	of hours		Total number of ZZU hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
	lec	cl	lab	pr	sem			
Ī								

4.2.4 List of specialization modules

4.2.4.1 Specialization subjects (e.g. whole specialization) modules (min. .29... ECTS points):

No.	. Course/group	Name of course/group of courses	Wee	ekly nı	ımbe	r of	hours	Field-of-	Numbe	r of hours	Numb	er of ECTS points	Form ² of	Way3 of	Course/gr	oup of cou	ses	
	of courses	(denote group of courses with	lec	cl l	ab	pr	sem	study	ZZU	CNPS	total	BK classes ¹	course/group	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

	code	symbol GK)						educational effect symbol					of courses				
1		Marketing research module		2				S1_ZARZ_ZP_U03	30	90	3	1,0	Т	Z	Р	S	W
2		Diagnostic-design module				2			30	90	3	1,0	Т	Z	Р	S	W
3		Computer science module	7	2	5			S1_ZARZ_ZP_W06 S1_ZARZ_ZP_U05	210	450	15	7,0	Т	Z		S	W
4		Economic science module	2	1				S1_ZARZ_ZP_W07 S1_ZARZ_ZP_U07	45	120	4	1,5	Т	Z		S	W
5		Legal science module	2	2				S1_ZARZ_ZP_W08 S1_ZARZ_ZP_U08	60	120	4	2,0	Т	Z		S	W
		Total	11	7	5	2	0		375	510	29	12,5					

Marketing research module (min. .3... pkt ECTS):

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of			oup of cour	rses	
	of courses code	(denote group of courses with symbol $\mathbf{G}\mathbf{K}$)	lec	cl	lab	pr	sem	study educational effect	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
								symbol										
1	ZMZ1428C	Development of marketing questionnaires		2				K1_ZARZ_U14 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07	30	90	3	1,0	Т	Z		Р	S	w
2	ZMZ1429C	Consumer behavior research		2				K1_ZARZ_U14 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U07	30	90	3	1,0	Т	Z		Р	Ø	W
3	ZMZ1430C	Practical aspects of marketing research		2				K1_ZARZ_U14 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07	30	90	3	1,0	Т	Z		Р	S	W

 $^{^{1}}BK$ – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students $^{2}Traditional$ – enter T, remote – enter Z

³Exam – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

4	ZMZ1431C	Design of Marketing Research	2		K1_ZARZ_U14 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	00	W
		Total												

Diagnostic-design module (min. .3... pkt ECTS):

No.	. Course/group		Wee	kly n	ımbe	er of	hours	Field-of-study	Numbe	er of hours	Number of E	CTS points	Form ² of	Way ³ of	Course/grou	up of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind	type ⁷
1		Analysis and design of usable interactive systems				2		K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U18 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z		P	S	w
2		Analysis of marketing strategies in the Internet and digital media				2		K1_ZARZ_U06 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U02 K1_ZARZ_U05 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z		Р	S	w
3		Multi-criteria decision analysis in the enterprise				2		K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z		Р	S	w

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²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem) ⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses ⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization ⁷ Optional – enter W, obligatory – enter Ob

4		Analysis, evaluation and reengineering of logistics processes in an enterprise		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
5		Economic diagnosis of a business company		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U08 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_U02 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
6		Ergonomic diagnosis design of work stations		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U02 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	W
7		Diagnosis of the organizational state of the institution		2	K1 ZARZ_U06 K1 ZARZ_U17 K1 ZARZ_U15 K1 ZARZ_U16 K1 ZARZ_K08 K1 ZARZ_K07 K1 ZARZ_K07 K1 ZARZ_U02 K1 ZARZ_U02 K1 ZARZ_U02 K1 ZARZ_U02 K1 ZARZ_U03 K1 ZARZ_U03 K1 ZARZ_U03 K1 ZARZ_U03 K1 ZARZ_U03 K1 ZARZ_U03 K1 ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
8	ZMZ3157P	Improvement of Marketing Activities		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	W

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⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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⁷ Optional – enter W, obligatory – enter Ob

9	ZMZ1432P	Improving the personnel function within the organization		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
10	IEZ3132P	Improvement of organizational information systems		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U08 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
11		Improvement of quality management systems		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U02 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w
12		An improvement of company's financial management system		2	K1_ZARZ_U06 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U05 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
13		Economic conditions of the development of enterprises in the EU market		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U06 K1_ZARZ_U06 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	W

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⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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⁷ Optional – enter W, obligatory – enter Ob

14	IEZ3134P	E-economy		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w
15	PSZ3110P	Interpersonal communication		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	W
16	ZMZ3142P	Project Management Methods and Technics		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	т	Z	Р	S	w
17		Methods and techniques of management in practice		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U06 K1_ZARZ_U06 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08	30	90	3	1,0	Т	Z	Р	S	w
18	FBZ3122P	Financial planning and DCF techniques		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U12 K1_ZARZ_U12 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U06 K1_ZARZ_U07	30	90	3	1,0	т	Z	Р	S	w

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19	ZMZ3153P	The practice of marketing research		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
20		Problems of the computerization of enterprises - diagnosis of studies of cases		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w
21	ZMZ3205P	Entrepreneurship – initiation, establishment and conducting economic activity		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w
22		Cause and effect diagnosis of a company's financial		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_L05 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U06 K1_ZARZ_U06 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08 K1_ZARZ_U08	30	90	3	1,0	Т	Z	Р	S	W
23	EKZ3111P	Regional and local development		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w

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24		Estimating the profitability of material investments		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
25	PSZ1146P	Consumer behaviour		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_U08 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	Ø	w
26	FBZ3113P	Property management		2	K1_ZARZ_U06 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
27	ZMZ3144P	Change Management		2	K1 ZARZ_U06 K1 ZARZ_U17 K1 ZARZ_U15 K1 ZARZ_U16 K1 ZARZ_K08 K1 ZARZ_K07 K1 ZARZ_K07 K1 ZARZ_K07 K1 ZARZ_U05 K1 ZARZ_U02 K1 ZARZ_U02 K1 ZARZ_U04 K1 ZARZ_U04 K1 ZARZ_U04 K1 ZARZ_U05 K1 ZARZ_U04 K1 ZARZ_U05 K1 ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w
28		Financial analysis application for firm's management		2	K1 ZARZ_U06 K1 ZARZ_U17 K1 ZARZ_U15 K1 ZARZ_U15 K1 ZARZ_U16 K1 ZARZ_U16 K1 ZARZ_K08 K1 ZARZ_K07 K1 ZARZ_K07 K1 ZARZ_K07 K1 ZARZ_U05 K1 ZARZ_U05 K1 ZARZ_U06 K1 ZARZ_U06 K1 ZARZ_U07 K1 ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	W

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29	PSZ3112P	Application of psychology in management		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K07 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U07	30	90	3	1,0	Т	Z	Р	S	w
30		Contemporary organizational methods and techniques		2	K1_ZARZ_U06 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	Т	Z	Р	S	w
31		Models of business enterprises- Diagnosis of mechanism, practices of their employment		2	K1_ZARZ_U06 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U14 K1_ZARZ_K08 K1_ZARZ_K07 K1_ZARZ_K01 K1_ZARZ_U12 K1_ZARZ_U05 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U03 K1_ZARZ_U03	30	90	3	1,0	т	Z	Р	S	w
		Total			_			_						

Computer science module (min. .15... pkt ECTS):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of I	hours	Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Path I						,										
1	IEZ1178W	Data processing technology	1					K1_ZARZ_W24 K1_ZARZ_W26	15	60	2	0,5	Т	Z			S	W
2	IEZ1178L	Data processing technology			2			K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	30	60	2	1,0	Т	Z		Р	S	W
3	IEZ1179W	Programming applications	2					K1_ZARZ_W24	30	60	2	1,0	T	Z			S	W

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⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses ⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization ⁷ Optional – enter W, obligatory – enter Ob

						K1_ZARZ_W26									
4	IEZ1179L	Programming applications		2		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	30	60	2	1,0	Т	Z	Р	S	W
5	IEZ1180W	Modeling and analysis of MIS	2			K1_ZARZ_W24 K1_ZARZ_W26	30	60	2	1,0	Т	Z		S	W
6	IEZ1180L	Modeling and analysis of MIS		2		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	30	60	2	1,0	Т	Z	Р	S	W
7	IEZ1181W	Software Project in Management	2			K1_ZARZ_W24 K1_ZARZ_W26	30	60	2	1,0	Т	Z		S	W
8	IEZ1181L	Software Project in Management		1		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	15	30	1	0,5	Т	Z	Р	S	W
		Total					210	450	15	7,0					
		Path II													
1	IEZ1182W	Introduction to SQL	1			K1_ZARZ_W25	15	60	2	0,5	Т	Z		S	W
2	IEZ1182L	Introduction to SQL		2		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	30	60	2	1,0	Т	Z	Р	S	W
3	IEZ1183W	Programming web applications	2			K1_ZARZ_W25	30	60	2	1,0	T	Z		S	W
4	IEZ1183L	Programming web applications		2		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	30	60	2	1,0	Т	Z	Р	S	W
5	IEZ1184W	Introduction to BPMN	2			K1_ZARZ_W25	30	60	2	1,0	T	Z		S	W
6	IEZ1184L	Introduction to BPMN		2		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	30	60	2	1,0	Т	Z	Р	S	W
7	IEZ1185W	Software Project Management	2			K1_ZARZ_W25	30	60	2	1,0	Т	Z		S	W
8	IEZ1185L	Software Project Management		1		K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U12	15	30	1	0,5	Т	Z	Р	S	W
		Total					210	450	15	7,0					

Economic science module (*min.* .**4**... *pkt ECTS*):

N	lo	Course/group	Name of course/group of courses (denote	Wee	ekly	numb	er of	hours	Field-of-	Number	r of hours	Numb	er of ECTS points	Form ² of	Way3 of	Course/gro	oup of cou	rses	
		of courses code	group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
									effect symbol										

 $^{^{1}}$ BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students 2 Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem) ⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses ⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization ⁷ Optional – enter W, obligatory – enter Ob

1	EKZ1148W	GLOBALIZATION AND EUROPEAN INTEGRATION	2		K1_ZARZ_W03	30	60	2	1,0	Т	Z		S	W
2	EKZ1148C	GLOBALIZATION AND EUROPEAN INTEGRATION		1	K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	Т	Z	Р	S	W
3	EKZ1149W	Government and Market in the Economy	2		K1_ZARZ_W03	30	60	2	1,0	Т	Z		S	W
4	EKZ1149C	Government and Market in the Economy		1	K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	Т	Z	Р	S	W
5	EKZ1147W	MARKET STRUCTURE AND THEIR REGULATION	2		K1_ZARZ_W03	30	60	2	1,0	Т	Z		S	W
6	EKZ1147C	MARKET STRUCTURE AND THEIR REGULATION		1	K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	Т	Z	Р	S	W
		Total												

Legal science module (min. .4... pkt ECTS):

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses	(denote group of courses with symbol	lec	cl	lab	pr	sem	study educational	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
	code	GK)						effect					or courses					
								symbol										
1	PRZ1138W	Economic activities rateable	1					K1_ZARZ_W03 K1_ZARZ_W21 K1_ZARZ_W04	15	30	1	0,5	Т	Z			S	1
2	PRZ1138C	Economic activities rateable		1				K1_ZARZ_K09 K1_ZARZ_U06 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K05 K1_ZARZ_K04	15	30	1	0,5	Т	Z		Р	S	2
3	PRZ1137W	Intellectual Property Legal Protection	1					K1_ZARZ_W03 K1_ZARZ_W21 K1_ZARZ_W04	15	30	1	0,5	Т	Z			S	3
4	PRZ1137C	Intellectual Property Legal Protection		1				K1_ZARZ_K09 K1_ZARZ_U06 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K05 K1_ZARZ_K04	15	30	1	0,5	Т	Z		Р	S	4
5	PRZ1139W	The labor market and promoting employment	1					K1_ZARZ_W03 K1_ZARZ_W21 K1_ZARZ_W04	15	30	1	0,5	Т	Z			S	5
6	PRZ1139C	The labor market and promoting employment		1				K1_ZARZ_K09 K1_ZARZ_U06 K1_ZARZ_K01 K1_ZARZ_U17	15	30	1	0,5	Т	Z		Р	S	6

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⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses ⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization ⁷ Optional – enter W, obligatory – enter Ob

						K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K05 K1_ZARZ_K04									
7	PRZ1136W	MARKET CONSUMER PROTECTION	1			K1_ZARZ_W03 K1_ZARZ_W21 K1_ZARZ_W04	15	30	1	0,5	Т	Z		S	7
8	PRZ1136C	MARKET CONSUMER PROTECTION		1		K1_ZARZ_K09 K1_ZARZ_U06 K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_K05 K1_ZARZ_K04	15	30	1	0,5	Т	Z	Р	S	8
		Total													

Altogether for specialization modules:

			0					
	То	otal number o	of hours		Total number of ZZU hours		Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
11	7	5	2	0	375	510	29	12,5

4.3 Training module (Faculty Council resolution on principles of crediting training – attachment no. ...)

Name of trai	ning		
Number of ECTS points	Number o ECTS poin for BK class	ts	Code
5	0	 A student must present at least one of the following documents: a report from the enterprise or institution in which the work placement occurred containing: the length of the work placement and assessment of the success of the placement: 	

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³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem) ⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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⁷ Optional – enter W, obligatory – enter Ob

- a report from the enterprise confirming the fact that the student was employed, the length of employment and a description of the tasks carried out by the student,
- a certificate witnessing a placement organized by AIESEC or other student organization of a similar nature,
- a written report documenting the results of the placement.
2. Work placements are assessed by the dean (assistant dean for academic affairs), or a person appointed by him/her, after reviewing the opinion of the student's placement supervisor and/or the documentation regarding the placement.
Training objective
Preparing students for future professional employment, as well as developing the skills and carrying out the tasks required in a chosen functional area of an organization - in accordance with the stated goals of work practice, in particular: - experiencing the demands and environment of the workplace, - making use of the theoretical and practical abilities developed during the course in a work environment,
-

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⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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⁷ Optional – enter W, obligatory – enter Ob

organizational activity, together with the socio-cultural function of an organization.

A work placement is carried out according to a program set out in agreement with the place of work and covers the following elements:

- a) a description of the role to be carried out,
- b) the relation between the work placement and the student's studies:
- defining the knowledge required to carry out the work placement, which a student should be in possession of before the placement starts,
- indicating the subjects from the course program which will be fundamental to the competencies required during the placement,
- in cases where a work placement is carried out in the final year of a student's studies, the relationship between the placement and the student's diploma thesis should be defined,
- a description of the skills, knowledge and types of conduct that a student should develop during the work placement.

4.4 Diploma dissertation module

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³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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⁷ Optional – enter W, obligatory – enter Ob

Type of diploma dissertation	Licencjat / inżynier / magister / magister inżynier						
Number of diploma dissertation semesters	Number of ECTS points	Code					
2	1	ZMZ3206S - Diploma seminar					
-	14	ZMZ1231D - Bachelor thesis					
Character	of diploma dissertation	•					
Literature survey	y, project, computer program,	etc.					
Number of BK ¹ ECTS points		15					

5. Ways of verifying assumed educational effects

Type of classes	Ways of verifying assumed educational effects
lecture	Examination or test - multiple choice questions with single or multiple answers; open questions
problems classes	Test (multiple choice and/or open questions); written reports in the form of presentations - literature and case studies, diagnostic and/or project reports - empirical research in real organizations, presenting the opinions of representatives of such organizations; spoken presentations using modern presentation technology
laboratory	Technical report or test
project	Written report documenting the diagnosis and solution of a problem, spoken presentation of the project with questions.
seminar	Choice and formulation of a problem/theme; activeness in discussions, written report in an academic style, essay, "mini"-monograph. Spoken presentations using modern presentation technology

 $^{^{1}}BK$ – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students $^{2}Traditional$ – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem) ⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses ⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization ⁷ Optional – enter W, obligatory – enter Ob

	Written report on the work practice given by the student's placement supervisor, confirmation of the completion and nature of the work placement by the employer
_	Written report satisfying the current regulations for diploma theses, assessed by the supervisor and a reviewer using an appropriate form.
examination	Spoken presentation of the results of the diploma thesis, answers to questions given by the examination committee, spoken answers to randomly chosen questions from the set appearing in the program of studies.

6. Total number of ECTS points, which student has to obtain from classes requiring direct academic teacher-student contact (enter total of ECTS points for courses/groups of courses denoted with code BK^1)

...**161**.... ECTS

7. Total number of ECTS points, which student has to obtain from basic sciences classes

Number of ECTS points for obligatory subjects	25
Number of ECTS points for optional subjects	0
Total number of ECTS points	25

8. Total number of ECTS points, which student has to obtain from practical classes, including laboratory classes (enter total number of ECTS points for courses/group of courses denoted with code P)

Number of ECTS points for obligatory subjects	69

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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⁷ Optional – enter W, obligatory – enter Ob

Number of ECTS points for optional subjects	26
Total number of ECTS points	95

9. Minimum number of ECTS points, which student has to obtain doing education modules offered as part of university-wide classes or other main field of study (enter number of ECTS points for courses/groups of courses denoted with code OG)

...6.... ECTS points

10. Total number of ECTS points, which student may obtain doing optional modules (min. 30% of total number of ECTS points)

...**38**.... ECTS points

11. Range of diploma dissertation

Character of effect/ issue	EXAM QUESTION
K1_ZARZ_W01	1. Origin and evolution of organizational sciences
	2. Economic sciences – scope and relation to social and technical sciences.
K1_ZARZ_W02	3. Types of economic systems and their elements.
K1_ZARZ_W03	4. Indexes to comparising the economies and their usefulness in making decisions on the enterprises level.
	5. The Program of the Single European Market and their influence on the enterprises activities.
	6. Market and its element according to classical and liberal economics.
	7. Market structures - perfect competition, monopolistic competition, oligopoly, monopoly
	8. Theory of the regulation actions by government (e.g. the theory of market failures).

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

9. The being and features of the commercial law. Subjects of the commercial law. 10. Protection of rights exclusive up to the intellectual property in the market operations of the enterprise. 11. Legislative protection of competition and of consumers.	
11. Legislative protection of competition and of consumers.	
• • •	
12 Constitute and the liquidation of entermises. The heal-market are and anotification are and in as	
12. Creating and the liquidation of enterprises. The bankruptcy proceedings and rectification proceedings.	
13. Intellectual property - the being, elements, the licence agreement as the instrument of the commercialization of the intellectual property.	tual
K1_ZARZ_W05 14. Organization life-cycle – phases and its determinants	
15. Elements of organization – people, technology, processes, structures	
16. Legal, organizational and ownership forms of enterprises.	
17. Organizational resources, potential and assets	
K1_ZARZ_W06 18. Legal determinants of the enterprise operations in the areas of employment, insurance, environmental protection, agreeme contracting parties, etc.	nts with
19. Social, economic and political determinants of organizational behavior – national and global dimension.	
20. Enterprise's cooperation with other entities: the essence and forms of cooperation, corporate and concentration forms.	
K1_ZARZ_W07 21. Issue, aims and functions of management	
22. Management methods and techniques - classification criteria, the application examples of selected methods or techniques	
23. Management as information and decision-making process	
K1_ZARZ_W08 24. Factors influencing organizational structures	
25. Organizational structure – determinants and directions of evolution	
K1_ZARZ_W09 26. Definition and generic classification of processes. Identifying, mapping, designing and implementing the process.	
27. The functional and process organization of an enterprise.	
28. Models and standardization of processes. Methods of processes measurement and evaluation.	
K1_ZARZ_W10 29. Aims, phases and tools of marketing management.	
30. Marketing-mix as concept of market influences	
31. Scope and function of marketing research, its procedures and methods.	

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³Exam – enter 1, remote – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course / group of courses – enter O

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⁷ Optional – enter W, obligatory – enter Ob

K1_ZARZ_W11	32. Financial analysis in problem approach - evaluation of liquidity, profitability analysis, assets and equity structure 33. Capital investment – material and cash investments. Methods of investments productivity evaluation.	
	34. Company assets and capitals – balance sheet. Revenues and expenditures – financial result. Cash flow statement.	
	35. Accounts functioning. Chart of accounts.	
	36. Sources and rules of financing firm activity.	
K1_ZARZ_W12	37. Periodic evaluation of employees and their professional development – goals, principles, procedures.	
	38. Job evaluation (essence, aims, methods) and wages (wage tables, wage forms, wage functions).	
	39. Principles of creating and functioning the teams in organizations and the factors influencing on their efficiency.	
K1_ZARZ_W13	40. Goals and strategies of production management in the market economy.	
	41. Systems and processes of production and services – production management methods.	
K1_ZARZ_W14	42. The essence of logistics, its mainstays and the levels of logistics processes integration.	
	43. Logistics processes management. Logistics processes planning and organization in an organization.	
K1_ZARZ_W15		
	45. Techniques and methods of quality improvement. Quality costs.	
	46. Total Quality Management (TQM) and quality management systems according to ISO 9000 norms – basic differences	
K1_ZARZ_W16	47. Methods of diagnosing and improving the enterprise's activity - application examples in various functional areas.	
	48. Evaluation and choice of organizational problem best solution - main methods	
K1_ZARZ_W17	49. Leading as goals' attaining. Influence of motivation on human behaviour.	
	50. The essence of motivation and motivating. Theories of motivation and their characteristics.	
	51. Social integration processes in organization.	
K1_ZARZ_W18	52. Interpersonal conflicts – withing and between groups. Group cohesion.	
	53. Organizational culture and organizational behavior ethics.	
	54. Sources and manifestations of power in organization. Authority, influence, coalitions. Leadership.	
K1_ZARZ_W19	55. Forces that generate changes in the enterprise - change management models.	
	56. Process of implementing changes in the organization - the sources of change resistance and ways to neutralize them.	
K1_ZARZ_W20	57. Project initiation and definition. Project feasibility evaluation. Project risk analysis. Project structure.	
	58. The essence of project management and its role in management. The essence and types of projects. Project life cycle.	
	59. Project realization and resources planning. Project budgeting. Project realization steering. Project team organization.	
<u> </u>		

 $^{^{1}}$ BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students 2 Traditional – enter T, remote – enter Z

³Exam – enter I, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

K1_ZARZ_W21	60. Meaning and types of entrepreneurship, backgroud of initiation and development. 61. Meaning and types of innovation, organisations and institutions supporting the diffusion of innovation.
K1_ZARZ_W22	62. The influence of physical environment factors on a man at work.
K1_ZARZ_W23	63. Mathematical methods for management – examples of applications
K1_ZARZ_W24	64. Multicriterial analysis in decision-making – examples of problems and methods of problem solving 65. Intelligent management systems – general characteristics, examples of application.
K1_ZARZ_W25	66. Analysis and forecasting of development tendency – examples of applications. 67. Classical model of linear regression – examples of applications in management
K1_ZARZ_W26	68. Process of implementation and exploitation of management information systems. 69. Management information systems design: assumptions, phases, rules and tools. 70. Assumptions and aims of an enterprise informatization strategy.

12. Requirements concerning deadlines for crediting courses/groups of courses for all courses in particular modules

No.	Course code	Name of course	Crediting by deadline of (number of semester)

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³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem) ⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses ⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

13. Plan of studies (attachment no. ...5...)

Approved by faculty student government legislative body:
Date, name and surname, signature of student representative
Date, Dean's signature

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²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob