Attachment no. to Programme of Education

PROGRAMME OF STUDIES

1. Description

Number of semesters:6	Number ECTS points necessary to obtain qualifications:
Prerequisites (particularly for second-level studies):	Upon completion of studies graduate obtains professional degree of:
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 our courses in management have an Technology. 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

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programs in management 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, audio-visual 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:

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Area of Knowledge / Education: **SOCIAL SCIENCES**

Area of science: **ECONOMIC SCIENCES**

Scientific disciplines: MANAGAMENT SCIENCE, FINANCE, ECONOMICS

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. ..5.... ECTS points):

N	o 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
	PSZ1119W	Psychology	2					K1_ZARZ_W17	30	30	1	1	T	Z			KO	Ob
- 2	2 SCZ1110W	Sociology	2					K1_ZARZ_W17	30	30	1	1	T	Z			KO	Ob
	3 PSZ	Social competences module					2	K1_ZARZ_U10 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_U18 K1_ZARZ_K03 K1_ZARZ_K04 K1_ZARZ_K05 K1_ZARZ_K06 K1_ZARZ_K08 K1_ZARZ_K08 K1_ZARZ_K08	30	90	3	1	Т	Z		P	КО	W
		Total	4	0	0	0	2		90	150	5							

Social competences module (2 semester)

No.	Course/gro	Name of course/group of courses (denote	Wee	kly nu	ımber	of	Field-of-	Numbe	r of hours	Number	of ECTS	Form ²	Way ³		Course/grou	p of courses	s
	up of	group of courses with symbol GK)		hou	rs		study			poi	ints	of	of				
	courses code		le c	c 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	p a r	s e m	education al effect symbol	ZZU	CNPS	łączna	zajęć BK ¹	group of courses lec	creditin g cl	lab	pr	sem	typ ⁷

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1	PSZ1157S	Communication in management			2	30	90	3	1,0	T	Z	P	КО	W

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	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
1	JZL	Foreingn language B2.1		4				K1_ZARZ_U17 K1_ZARZ_U16	60	60	2	2	T	Z	O	P	KO	W
2	JZL	Foreingn language B2.2		4				K1_ZARZ_U17 K1_ZARZ_U16	60	90	3	2	T	Z	0	P	KO	W
		Total	0	8	0	0	0		120	150	5	4						

4.1.1.3 *Sporting classes* module (min. 1.... 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	-	ì	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	WFW	Sport activities		2					30	30	1	1	T	Z	0	P	KO	W
		Total	0	2	0	0	0		30	30	1	1						

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

No.	. Course/group	Name of course/group of courses	Weel	kly r	numb	er of	hours	Field-of-	Number	of hours	Numl	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cour	rses	
	of courses code	(denote 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

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								effect symbol									
1	IEZ1148W	Information technology	2					K1_ZARZ_W26	30	60	2	1	T	Z		K	Ob
2	IEZ1148L	Information technology			1			K1_ZARZ_U12 K1_ZARZ_U15 K1_ZARZ_U17	15	60	2	0,5	T	Z	P	K	Ob
		Total	2	0	1	0	0		45	120	4	1,5					

Altogether for general education modules

	Tota	l number 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				
6	10	1	0	2	285	450	15	9,5

4.1.2 List of basic sciences modules

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	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
1	MAZ1130W	Descriptive statistics	2					K1_ZARZ_W25	30	120	4	1,0	T	Е			PD	Ob
2	MAZ1130C	Descriptive statistics		1				K1_ZARZ_U15 K1_ZARZ_U14	15	60	2	0,5	T	Z		P	PD	Ob
3	MAZ1131W	Economical mathematics	2					K1_ZARZ_W03 K1_ZARZ_W23	30	120	4	1,0	T	E			PD	Ob
4	MAZ1131C	Economical mathematics		1				K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	T	Z		P	PD	Ob
		Total	6	4	0	0	0		150	630	21	5,0						

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4.1.2.2 Physics module

No.	. Course/group of courses	Name of course/group of courses (denote group of courses with	Weekly n	uml	per of	hour	s	Field-of-study educational effect	Numb	er of hours	Nui	mber of ECTS points	Form ² of course/group	Way ³ of		group of o	courses	š
	code	symbol GK)	lec	cl	lab	pr	sem	symbol	ZZU	CNPS	total	BK classes ¹	of courses	creditin g	university- wide ⁴	practical ⁵	kind ⁶	type ⁷
1	FZZ1104W	Work environment physics	1					K1_ZARZ_W22 S1_ZARZ_OM_W07	15	30	1	0,5	T	Z			PD	Ob
2	FZZ1104C	Work environment physics		1				K1_ZARZ_U06 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U13 S1_ZARZ_OM_U07	15	30	1	0,5	Т	Z		P	PD	Ob
3	FZZ1104L	Work environment physics			1			K1_ZARZ_U06 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U13 S1_ZARZ_OM_U07	15	60	2	0,5	Т	Z		P	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	We	ekly	numb	er of	hours	Field-of-	Numbe	er of hours	Numl	per of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	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
		Total																

other.....

Altogether for basic sciences modules:

Total number of hours	Total	Total	Total	Number of
	number	number	number	ECTS points

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					of ZZU hours	of CNPS hours	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.	T	Name of course/group of courses (denote group of courses with			ımber		ours	Field-of-study educational effect	Numbe	r of hours		er of ECTS oints	Form ² of course/group	Way ³ of crediting	Cours	se/group of	course	s
	code	symbol GK)	lec	cl	lab	pr	sem	symbol	ZZU	CNPS	total	BK classes 1	of courses		university- wide ⁴	practical ⁵	kind ⁶	type ⁷
1	ZMZ1256D	Bachelor thesis				2		KI_ZARZ_U18 KI_ZARZ_U16 KI_ZARZ_U11 KI_ZARZ_U11 KI_ZARZ_K06 KI_ZARZ_U06 KI_ZARZ_U07 KI_ZARZ_U17 KI_ZARZ_U12 KI_ZARZ_U12 KI_ZARZ_U14 KI_ZARZ_U05 KI_ZARZ_U05 KI_ZARZ_U05 KI_ZARZ_U05 KI_ZARZ_U05 KI_ZARZ_U04 KI_ZARZ_U04 KI_ZARZ_U04 KI_ZARZ_U04 KI_ZARZ_U04 KI_ZARZ_U02 KI_ZARZ_U07	30	420	14	0,0	Т	Z		P	K	Ob
2	PRZ1121W	Civil and commercial law	2					K1_ZARZ_W03 K1_ZARZ_W04	30	60	2	1,0	T	Z			K	Ob
3	PRZ1121C	Civil and commercial law		1				K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U06	15	60	2	0,5	T	Z		P	K	Ob
4	FBZ1152W	Corporate finance	2					K1_ZARZ_W11	30	90	3	1,0	T	Е			K	Ob
5	FBZ1152C	Corporate finance		1				K1_ZARZ_U07 K1_ZARZ_U03 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U17 K1_ZARZ_U17 K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U08 K1_ZARZ_U04 K1_ZARZ_U01	15	60	2	0,5	Т	Z		P	K	Ob

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6	ZMZ1250S	Diploma seminar				1	KI_ZARZ_K08 KI_ZARZ_U14 KI_ZARZ_K01 KI_ZARZ_U17 KI_ZARZ_U16 KI_ZARZ_U15	15	30	1	0,5	Т	Z	P	K	Ob
7	FBZ1150W	Essentials of finance	2				K1_ZARZ_W11	30	60	2	1,0	Т	Z		K	Ob
80	ZMZ1242W	Essentials of management	2				K1_ZARZ_W06 K1_ZARZ_W09 K1_ZARZ_W18 K1_ZARZ_W19 K1_ZARZ_W05 K1_ZARZ_W07 K1_ZARZ_W07	30	120	4	1,0	Т	Е		K	Ob
9	ZMZ1242C	Essentials of management		2			K1_ZARZ_K01 K1_ZARZ_U03 K1_ZARZ_U01 K1_ZARZ_U101 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U17 K1_ZARZ_U02 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U07 K1_ZARZ_U08	30	60	2	1,0	Т	Z	P	K	Ob
10	FBZ1154W	Financial analysis supported by computer	1				K1_ZARZ_W11	15	60	2	0,5	Т	Z		K	Ob
11	FBZ1154L	Financial analysis supported by computer			1		K1_ZARZ_K01 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U11 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U07	15	60	2	0,5	Т	Z	P	K	Ob
12	FBZ1153	Financial management	2				K1_ZARZ_W09 K1_ZARZ_W11	30	60	2	1,0	T	Z		K	Ob
13	FBZ1153C	Financial management		1			K1_ZARZ_U02 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_U05 K1_ZARZ_U03 K1_ZARZ_U11 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07	15	30	1	0,5	Т	Z	P	K	Ob
14	ZMZ1602Q	Internship (4th lub 5th semester)						0	180	5	0,0					Ob
15	ZMZ1247W	Logistics	1				K1_ZARZ_W09 K1_ZARZ_W14	15	30	1	0,5	Т	Z		K	Ob

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16	ZMZ1247C	Logistics		1			K1_ZARZ_U11 K1_ZARZ_U05 K1_ZARZ_U04 K1_ZARZ_U04 K1_ZARZ_K01 K1_ZARZ_E01 K1_ZARZ_U03 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07	15	30	1	0,5	Т	Z	P	K	Ob
17	EKZ1128W	Macroeconomics	2				K1_ZARZ_W02 K1_ZARZ_W01 K1_ZARZ_W03	30	120	4	1,0	Т	E		K	Ob
18	EKZ1128C	Macroeconomics		1			K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	60	2	0,5	Т	Z	P	K	Ob
19	IEZ1149W	Information Systems in Management	2				K1_ZARZ_W24 K1_ZARZ_W26	30	120	4	1,0	T	E		K	Ob
20	IEZ1149C	Information Systems in Management		1			K1_ZARZ_U12 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15	15	30	1	0,5	Т	Z	P	K	Ob
21	ZMZ1257L	Management training			2		K1_ZARZ_U05 K1_ZARZ_K08 K1_ZARZ_K03 K1_ZARZ_U03 K1_ZARZ_U11 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U15 K1_ZARZ_U07	30	60	2	1,0	Т	Z	P	K	Ob
22	ZMZ1248W	Marketing management	1				K1_ZARZ_W10	15	30	1	0,5	T	Z		K	Ob
23	ZMZ1248C	Marketing management		1			K1_ZARZ_U11 K1_ZARZ_U03 K1_ZARZ_K01 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U02 K1_ZARZ_U02 K1_ZARZ_U08	15	30	1	0,5	Т	Z	P	K	Ob
24	ZMZ1252	Marketing research	2				K1_ZARZ_W10	30	60	2	1,0	T	Z		K	Ob
25	ZMZ1252C	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_U05 K1_ZARZ_U07	30	90	3	1,0	Т	Z	P	K	Ob
26	EKZ1127W	Microeconomics	2				K1_ZARZ_W01 K1_ZARZ_W02 K1_ZARZ_W03	30	120	4	1,0	Т	Е		K	Ob

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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

27	EKZ1127C	Microeconomics		2			K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U17	30	60	2	1,0	Т	Z	P	K	Ob
							K1_ZARZ_U03									
28	ZMZ1249W	Operations management	1				K1_ZARZ_W09 K1_ZARZ_W13	15	60	2	0,5	T	E		K	Ob
29	ZMZ1249C	Operations management		1			KI_ZARZ_U04 KI_ZARZ_U14 KI_ZARZ_U03 KI_ZARZ_K01 KI_ZARZ_U16 KI_ZARZ_U16 KI_ZARZ_U15 KI_ZARZ_U07 KI_ZARZ_U002 KI_ZARZ_U02	15	30	1	0,5	Т	Z	P	K	Ob
30	ZMZ1249L	Operations management			1		K1_ZARZ_U04 K1_ZARZ_U11 K1_ZARZ_U03 K1_ZARZ_U03 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07 K1_ZARZ_U02 K1_ZARZ_U02	15	30	1	0,5	Т	Z	P	K	Ob
31	ZMZ1245W	Organizational behaviour	2				K1_ZARZ_W18	30	60	2	1,0	T	Z		K	Ob
32	ZMZ1245C	Organizational behaviour		1			KI_ZARZ_K09 KI_ZARZ_K01 KI_ZARZ_U17 KI_ZARZ_U16 KI_ZARZ_U16 KI_ZARZ_K02 KI_ZARZ_K06 KI_ZARZ_K06 KI_ZARZ_K06 KI_ZARZ_L09 KI_ZARZ_U19 KI_ZARZ_U109	15	60	2	0,5	Т	Z		K	Ob
33	ZMZ1243W	Organizational science	2				K1_ZARZ_W05 K1_ZARZ_W09 K1_ZARZ_W06	30	60	2	1,0	Т	Z		K	Ob
34	ZMZ1243C	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	P	K	Ob
35	ZMZ1258W	Business Process Management	2				K1_ZARZ_W09 K1_ZARZ_W16	30	60	2	1,0	T	Z		K	Ob
36	ZMZ1255W	Total quality management	2				K1_ZARZ_W15 S1_ZARZ_OM_W05	30	90	3	1,0	T	Е		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

Total 30 18 4 2 1 825 2730 90 26.5	37	ZMZ1255C	Total quality management Total	30	2	4	2	1	K1_ZARZ_K01 K1_ZARZ_U03 K1_ZARZ_U17 K1_ZARZ_U16 K1_ZARZ_U15 K1_ZARZ_U07 K1_ZARZ_U06 S1_ZARZ_U06	30 825	60 2730	2	1,0 26,5	Т	Z		P	K	Ob
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4.1.3.2 module

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	-)	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	l number of	hours		Total	Total	Total	Number of
					number	number		ECTS points
					of	of CNPS	of ECTS	for BK
					ZZU	hours	points	classes1
					hours			
lec	cl	lab	pr	sem				
30	18	4	2	1	825	2730	90	26,5

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. ECTS points):

No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	er 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																

4.2.1.2 *Foreign languages* 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																

4.2.1.3 Sporting classes module (min. ECTS points):

N	o (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	(denote group of courses with	lec	cl	lab	pr		study	ZZU	CNPS	total	BK classes ¹	course/group	crediting	university-wide4	practical ⁵	kind ⁶	type ⁷
		code	symbol GK)						educational					of courses					71
									effect symbol										
									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								

4.2.1.4 *Information technologies* 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 general education modules:

			0	- 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	nours		

4.2.2 List of basic sciences modules

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

No Course/g	oup Name of course/group of courses	We	eekly	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 cour code	(denote group of courses with symbol GK)	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

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

				symbol					
							_		
	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	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																

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	ber of ECTS points	Form ² of	-	ì	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
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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

					number of ZZU hours	number of CNPS hours	ECTS points for BK classes ¹
lec	cl	lab	pr	sem			

4.2.3 List of main-field-of-study modules

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

		1121011 1111111111111111111111111111111	(- ·- I	, .										
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 main-field-of-study modules:

			0				_	
	To	otal number o			of	Total number of CNPS	of ECTS	for BK
					ZZU hours	hours	points	classes1
					nours			
lec	cl	lab	pr	sem				

4.2.4 List of specialization 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

4.2.4.1 Specialization subjects (e.g. whole specialization) modules (min. .27... ECTS points):

No	Course/group of courses	Name of course/group of courses (denote group of courses with symbol GK)	W	eekly n	umber	of ho	urs	Field-of- study		nber of ours		mber of rS points	Form2 of course/group			e/group of	course	ès
	code	courses with symbol Gic)						educational		Juis	LC.	o points	of courses	Cicditing	,			
			lec	cl	lab	pr	sem	effect symbol	ZZU	CNPS	total	BK classes1			university- wide4	practical5	kind6	type7
1	ZMZ1246W	Contemporary organizational methods and techniques	1					S1_ZARZ_OM_W10	15	30	1	0,5	Т	Z			S	Ob
2	ZMZ1246C	Contemporary organizational methods and techniques		1				S1_ZARZ_OM_U10	15	30	1	0,5	Т	Z		P	S	Ob
3	IFRZIISIW I	Financial accounting in the organizational decision making process	2					S1_ZARZ_OM_W01	30	60	2	1,0	Т	Z			S	Ob
4	FBZ1151C	Financial accounting in the organizational decision making process		1				S1_ZARZ_OM_U01	15	60	2	0,5	Т	Z		P	S	Ob
5	EKZ1129W	Introduction to risk management	1					S1_ZARZ_OM_W08	15	30	1	0,5	T	Z			S	Ob
6	EKZ1129C	Introduction to risk management		1				S1_ZARZ_OM_U08	15	60	2	0,5	T	Z		P	S	Ob
7	ZMZ1251	Leading project in modern organizations	2					S1_ZARZ_OM_W02	30	90	3	1,0	T	E			S	Ob
8	ZMZ1251C	Leading project in modern organizations		1				S1_ZARZ_OM_U02	15	60	2	0,5	T	Z		P	S	Ob
9	ZMZ1244W	Marketing in the information society	2					S1_ZARZ_OM_W03	30	120	4	1,0	T	E			S	Ob
10	ZMZ1244C	Marketing in the information society		2				S1_ZARZ_OM_U03	30	60	2	1,0	T	Z		P	S	Ob
11	ZMZ1253W	Methods and tools of data analysis	1					S1_ZARZ_OM_W09	15	30	1	0,5	T	Z			S	Ob
12	ZMZ1253L	Methods and tools of data analysis			1			S1_ZARZ_OM_U09	15	60	2	0,5	T	Z		P	S	Ob
13	ZMZ1254W	Modern human resorce management	2					S1_ZARZ_OM_W04	30	60	2	1,0	T	Z			S	Ob
14	ZMZ1254C	Modern human resorce management		2				S1_ZARZ_OM_U04	30	60	2	1,0	T	Z		P	S	Ob
		Total	11	8	1	0	0		300	810	27	10,0						

^{4.2.4.2}(e.g. diploma profile) module (min. 23 ECTS points):

BK – 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

No.	Course/gro up of	Name of course/group of courses (denote group of courses with symbol GK)	Wee	ekly ho	nun ours		of	Field-of- study educational	l .	mber of hours		of ECTS ints	Form ² of course/	Way ³ of		Course/grou	p of courses	3
NO.	courses		lec	c 1	1 a b	p r	s e m	effect symbol	ZZ U	CNPS	total łączna	BK classes	group of courses	creditin g -	universi ty- wide ⁴	practical 5	kind ⁶	type ⁷
1	IEZ	Computer science module	7	2	5	0	0		210	450	15	7,0	T	Z			S	W
2	EKZ	Economic science module	2	1					45	120	4	1,5	T	Z			S	W
3	PRZ	Legal science module	2	2					60	120	4	2,0	Т	Z			S	W
		Razem	11	5	5	0	0		315	690	23	10,5						

Modules

No.	Course/gro	Name of course/group of courses (denote group of courses with symbol GK)	We	-	numb	oer o	of	Field-of- study educational		mber of nours		of ECTS nts	Form ² of course/	Way ³ of	(Course/grou	p of course	s
NO.	up of courses		le c	c 1	l a b	p r	s e m	effect symbol	ZZ U	CNPS	total łączna	BK classes	group of courses	creditin g -	universi ty- wide ⁴	practical 5	kind ⁶	type ⁷
		Computer science module (2 semester)	1		2				45	120	4							
1	IEZ1208W	Data processing technology	1					K1_ZARZ_W24 K1_ZARZ_W25 K1_ZARZ_W26	15	60	2	0,5	T	Z			S	W
2	IEZ1208L	Data processing technology			2			K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K02	30	60	2	1,0	Т	Z		P	S	W
		Computer science module (3 semester)	2		2				60	120	4							
1	IEZ1211W	Programming applications	2					K1_ZARZ_W24 K1_ZARZ_W25 K1_ZARZ_W26	30	60	2	1,0	T	Z			S	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

2	IEZ1211L	Programming applications			2	K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K02	30	60	2	1,0	Т	Z	P	S	W
		Economic science module (3 semester)	2	1			45	120	4						
1	FBZ1187 W	Financial Engineering	2			K1_ZARZ_W11	30	60	2	1,0	Т	Z		S	W
2	FBZ1187C	Financial Engineering		1		K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K01	15	60	2	0,5	Т	Z	P	S	W
3	EKZ1166 W	Market Structures and their Regulation	2			K1_ZARZ_W11	30	60	2	1,0	Т	Z		S	W
4	EKZ1166 C	Market Structures and their Regulation		1		K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K01	15	60	2	0,5	Т	Z	P	S	W
		Computer science module (4 semester)	2	2			60	120	4						
1	IEZ1209W	Investigation of MIS requirements	1			K1_ZARZ_W24 K1_ZARZ_W25 K1_ZARZ_W26	15	30	1	0,5	Т	Z		S	W
2	IEZ1209C	Investigation of MIS requirements		1		K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K02	15	30	1	0,5	Т	Z	P	S	W
3	IEZ1210W	Management information systems modeling	1			K1_ZARZ_W24 K1_ZARZ_W25 K1_ZARZ_W26	15	30	1	0,5	T	Z		S	W
4	IEZ1210C	Management information systems modeling			1	K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K02	15	30	1	0,5	Т	Z	P	S	W
		Legal science module (4 semester)	2	2			60	120	4						
1	PRZ1156 W	Law essentials	1			K1_ZARZ_W03 K1_ZARZ_W21 K1_ZARZ_W04	15	30	1	0,5	T	Z		S	W
2	PRZ1156C	Law essentials		1		K1_ZARZ_U06 K1_ZARZ_K01 K1_ZARZ_K04 K1_ZARZ_K05 K1_ZARZ_K09z	15	30	1	0,5	Т	Z	P	S	W
3	PRZ1155 W	International law	1			K1_ZARZ_W03 K1_ZARZ_W21 K1_ZARZ_W04	15	30	1	0,5	Т	Z		S	W
4	PRZ1155C	International law		1		K1_ZARZ_U06 K1_ZARZ_K01 K1_ZARZ_K04 K1_ZARZ_K05 K1_ZARZ_K09z	15	30	1	0,5	Т	Z	P	S	W
					_	1	1.5	00							<u> </u>
	1	Computer science module (5 semester)	2		1	K1_ZARZ_W24	45	90	3						<u> </u>
1	IEZ1212W	Software project in management	2			K1_ZARZ_W25 K1_ZARZ_W26	30	60	2	1,0	T	Z		S	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

2	IEZ1212L	Software project in management			1		K1_ZARZ_U15 K1_ZARZ_U16 K1_ZARZ_U17 K1_ZARZ_K02	15	30	1	0,5	Т	Z		P	S	W
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Altogether for specialization modules:

		11100	,001101	ioi speciai	LLUUIUII	1110441	.001	
	Tota	l number 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				
22	13	6	0	0	615	1500	50	20,5

 $^{^{1}}$ 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

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

Name of trai Number of ECTS points	Number of ECTS points for BK classes ¹	Training crediting mode	Code
5	0	1. 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: - 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.	ZMZ1602

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

²Traditional – enter T, remote – enter Z

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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

Training duration	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, - developing social, practical and organizational abilities and positive working habits, as well as stimulating interest in the practical problems encountered in a chosen area of 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

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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

Type of diploma dissertation	Licencjat / inżynier /	magister / magister inżynier
Number of diploma dissertation semesters	Number of ECTS points	Code
2	1 14	ZMZ1250S Diploma seminar ZMZ1256D Bachelor thesis
Character	of diploma dissertation	
di	iagnostic or design	
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

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	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
work placement	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
1 -	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

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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	74
Number of ECTS points for optional subjects	20
Total number of ECTS points	94

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)

...**32**.... ECTS points

11. Range of diploma dissertation

Character of effect/ issue	EXAM QUESTION
K1_ZARZ_W01	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.

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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).
K1_ZARZ_W04	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.
	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.
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, agreements with
	contracting parties, etc.
	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.
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K1_ZARZ_W10	29. Aims, phases and tools of marketing management.	
111_Z/112_1110	30. Marketing-mix as concept of market influences	
	31. Scope and function of marketing research, its procedures and methods.	
K1_ZARZ_W11	32. Financial analysis in problem approach - evaluation of liquidity, profitability analysis, assets and equity structure	
K1_ZAKZ_W11	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	. 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	44. Goals and stages of DMAIC methodology (Define – Measure – Analyze – Improve – Control) used in the Six Sigma approach.	
	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.	

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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.
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 requirements

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

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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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