

PROGRAMME OF EDUCATION

FACULTY OF COMPUTER SCIENCE AND MANAGEMENT

MAIN FIELD OF STUDY: MANAGEMENT

Area of Knowledge / Education: **SOCIAL SCIENCES**, Area of science: **ECONOMIC SCIENCES**,

Scientific disciplines: **MANAGEMENT SCIENCE, FINANCE, ECONOMICS**

EDUCATION LEVEL: 1st level, licencjat studies

FORM OF STUDIES: full-time

PROFILE: general academic

SPECIALIZATION ORGANIZATIONAL MANAGEMENT (OM)

LANGUAGE OF STUDY: English

Content:

1. Assumed educational effects defined for main field of study – attachment no. 1
2. Assumed educational effects defined for specialization – attachment no. 2
3. Programme of studies – attachment no. 3
4. Principles of credit the practice – attachment no. 4
5. Plan of studies – attachment no. 5
6. Matrix of correlation between area educational effects and main-field-of-study educational effects – attachment no. 6

Faculty Council Resolution of 29.05.2018

In effect since 1.10.2018

PROGRAMME OF STUDIES

1. Description

<i>Number of semesters:</i> 6	<i>Number ECTS points necessary to obtain qualifications:</i> 180
<i>Prerequisites (particularly for second-level studies):</i> <i>According to the resolution No. 165/9/ 2016-2020 of PWr Senate. from 29 May 2017</i>	<i>Upon completion of studies graduate obtains professional degree of: Bachelor of Science Ist level qualifications</i>
<i>Possibility of continuing studies: second-level studies (Master level)</i>	<i>Graduate profile, employability:</i> 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

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	graduate could also manage a small team of workers and, in particular, run their own enterprise.
<p><i>Indicate connection with University's mission and its development strategy:</i></p> <p>Courses in Management are carried out within the Faculty of Computer Science and Management at Wrocław University of Science and 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.</p> <p>The educational program in Management is coherent with the mission of Wrocław University of Science and Technology in the following areas:</p> <ul style="list-style-type: none"> • 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 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 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. <p>The development plan of the department is in line with the strategy of the university as a whole. In particular, the department</p>	

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“...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 Science and Technology, our 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 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, they 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

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<p>infrastructure, including modernization of lecture theaters, audio-visual equipment and computer laboratories.</p>	
<p>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.</p>	

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: **MANAGEMENT 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. ...6.... ECTS points):

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	PSZ1119W	Psychology	2						30	30	1	1,0	T	Z			KO	Ob
2	SCZ2506W	Sociology	2						30	30	2	2,0	T	Z			KO	Ob
3	PSZ	Social competences module					2		30	90	3	1,0	T	Z		P	KO	W
Total			4	0	0	0	2		90	150	6	4						

Social competences module (2 semester)

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	łączna	zajęc BK ¹			lab	pr	sem	typ ⁷
1	PSZ1157S	Communication in management					2		30	90	3	1,0	T	Z		P	KO	W
Total			0	0	0	0	2		30	90	3	1,0						

4.1.1.2 Foreign languages module (min. ECTS points):

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

4.1.1.3 Sporting classes module (min. ECTS points):

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

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

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses				
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷	
1	IEZ1148W	Information technology	2						30	60	2	1,0	T	Z				K	Ob
2	IEZ1148L	Information technology			1				15	60	2	0,5	T	Z		P		K	Ob
		Total	2	0	1	0	0		45	120	4	1,5							

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Altogether for general education modules

Total 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				
6	0	1	0	2	165	360	13	6,5

4.1.2 List of basic sciences modules

4.1.2.1 Mathematics module

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses				
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷	
1	MAZ1130W	Descriptive statistics	2						30	120	4	1,0	T	E				PD	Ob
2	MAZ1130C	Descriptive statistics		1					15	60	2	0,5	T	Z		P		PD	Ob
3	MAZ1146W	Mathematical Economics	2						30	120	4	1,0	T	E				PD	Ob
4	MAZ1146C	Mathematical Economics		1					15	60	2	0,5	T	Z		P		PD	Ob
5	MAT1448	Matematyka (GK)	2	2					60	270	9	2,0	T	E				PD	Ob
Total			6	4	0	0	0		150	630	21	5,0							

4.1.2.2 Physics module

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses				
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷	
1	FZZ2503W	Work environment physics	2						30	50	2	1,0	T	Z				PD	Ob

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2	FZZ2503C	Work environment physics		1					15	30	1	0,5	T	Z		P	PD	Ob
3	FZZ2503L	Work environment physics			1				15	30	1	0,5	T	Z		P	PD	Ob
Total			2	1	1	0	0		60	110	4	2,0						

4.1.2.3 Chemistry module

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

Altogether for basic sciences modules:

Total 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				
8	5	1	0	0	210	740	25	7,0

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4.1.3 List of main-field-of-study modules

4.1.3.1 Obligatory main-field-of-study modules

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses				
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷	
1	ZMZ1256D	Bachelor thesis				2			30	420	14	0,0	T	Z			P	K	Ob
2	PRZ1121W	Civil and commercial law	2						30	60	2	1,0	T	Z				K	Ob
3	PRZ1121C	Civil and commercial law		1					15	60	2	0,5	T	Z			P	K	Ob
4	FBZ1152W	Corporate finance	2						30	90	3	1,0	T	E				K	Ob
5	FBZ1152C	Corporate finance		1					15	60	2	0,5	T	Z			P	K	Ob
6	FBZ1150W	Essentials of finance	2						30	60	2	1,0	T	Z				K	Ob
7	ZMZ1242W	Essentials of management	2						30	120	4	1,0	T	E				K	Ob
8	ZMZ1242C	Essentials of management		2					30	60	2	1,0	T	Z			P	K	Ob
9	FBZ1154W	Financial analysis supported by computer	1						15	60	2	0,5	T	Z				K	Ob
10	FBZ1154L	Financial analysis supported by computer			1				15	60	2	0,5	T	Z			P	K	Ob
11	FBZ1153	Financial management	2						30	60	2	1,0	T	Z				K	Ob
12	FBZ1153C	Financial management		1					15	30	1	0,5	T	Z			P	K	Ob
13	ZMZ2623Q	Internship (4th lub 5th semester)							0	160	5	0,0							Ob
14	ZMZ1247W	Logistics	1						15	30	1	0,5	T	Z				K	Ob
15	ZMZ1247C	Logistics		1					15	30	1	0,5	T	Z			P	K	Ob
16	EKZ1182W	Macroeconomics	2						30	120	4	1,0	T	E				K	Ob
17	EKZ1182C	Macroeconomics		1					15	60	2	0,5	T	Z			P	K	Ob
18	IEZ1228W	Information Systems in Management	2						30	90	3	1,0	T	Z				K	Ob
19	IEZ1228L	Information Systems in Management			1				15	60	2	0,5	T	Z			P	K	Ob
20	ZMZ1257L	Management training			2				30	60	2	1,0	T	Z			P	K	Ob
21	ZMZ1248W	Marketing management	1						15	30	1	0,5	T	Z				K	Ob
22	ZMZ1248C	Marketing management		1					15	30	1	0,5	T	Z			P	K	Ob
23	ZMZ1252	Marketing research	2						30	60	2	1,0	T	Z				K	Ob
24	ZMZ1252C	Marketing research		2					30	90	3	1,0	T	Z			P	K	Ob
25	EKZ1127W	Microeconomics	2						30	120	4	1,0	T	E				K	Ob
26	EKZ1127C	Microeconomics		2					30	60	2	1,0	T	Z			P	K	Ob
27	ZMZ1249W	Operations management	1						15	60	2	0,5	T	E				K	Ob
28	ZMZ1249C	Operations management		1					15	30	1	0,5	T	Z			P	K	Ob

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29	ZMZ1249L	Operations management			1					15	30	1	0,5	T	Z		P	K	Ob
30	ZMZ1245W	Organizational behaviour	2							30	60	2	1,0	T	Z			K	Ob
31	ZMZ1245C	Organizational behaviour		1						15	60	2	0,5	T	Z			K	Ob
32	ZMZ1243W	Organizational science	2							30	60	2	1,0	T	Z			K	Ob
33	ZMZ1243C	Organizational science		1						15	30	1	0,5	T	Z		P	K	Ob
34	ZMZ1258W	Business Process Management	2							30	60	2	1,0	T	Z			K	Ob
35	ZMZ1255W	Total quality management	2							30	90	3	1,0	T	E			K	Ob
36	ZMZ1255C	Total quality management		2						30	60	2	1,0	T	Z		P	K	Ob
Total			30	17	5	2	0			810	2680	89	26,0						

4.1.3.2 module

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

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

Total 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				
30	17	5	2	0	810	2680	89	26,0

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4.2 List of optional modules

4.2.1 List of general education modules

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

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

4.2.1.2 Foreign languages module (min.5..... ECTS points):

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses				
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷	
1	JZL	Foreingn language B2.1		4				60	60	2	2,0	T	Z	O	P	KO	W		
2	JZL	Foreingn language B2.2		4				60	90	3	2,0	T	Z	O	P	KO	W		
		Total	0	8	0	0	0	120	150	5	4,0								

4.2.1.3 Sporting classes module (min. .0... ECTS points):

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses				
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷	
1	WFW	Sport activities		2				30	30	0	0,0	T	Z	O	P	KO	W		

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Total			0	2	0	0	0		30	30	0	0,0							

4.2.1.4 Information technologies module (min. ECTS points):

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

Altogether for general education modules:

Total 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				
0	10	0	0	0	150	180	5	4,0

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

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

⁷Optional – enter W, obligatory – enter Ob

4.2.2 List of basic sciences modules

4.2.2.1 Mathematics module (min. ECTS points):

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

4.2.2.2 Physics module (min. ECTS points):

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

4.2.2.3 Chemistry module (min. ECTS points):

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

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

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

⁷Optional – enter W, obligatory – enter Ob

Altogether for basic sciences modules:

Total 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				

4.2.3 List of main-field-of-study modules

4.2.3.1 module (min. ..1.. ECTS points):

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	ZMZ1250S	Diploma seminar					1		15	30	1	0,5	T	Z		P	K	Ob
		Total	0	0	0	0	1		15	30	1	0,5						

Altogether for main-field-of-study modules:

Total 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				
0	0	0	0	1	15	30	1	0,5

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

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

⁷Optional – enter W, obligatory – enter Ob

4.2.4 List of specialization modules

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

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	ZMZ1246W	Contemporary organizational methods and techniques	1					15	30	1	0,5	T	Z			S	Ob	
2	ZMZ1246C	Contemporary organizational methods and techniques		1				15	30	1	0,5	T	Z		P	S	Ob	
3	FBZ1151W	Financial accounting in the organizational decision making process	2					30	60	2	1,0	T	Z			S	Ob	
4	FBZ1151C	Financial accounting in the organizational decision making process		1				15	60	2	0,5	T	Z		P	S	Ob	
5	EKZ1129W	Introduction to risk management	1					15	30	1	0,5	T	Z			S	Ob	
6	EKZ1129C	Introduction to risk management		1				15	60	2	0,5	T	Z		P	S	Ob	
7	ZMZ1251	Leading project in modern organizations	2					30	90	3	1,0	T	E			S	Ob	
8	ZMZ1251C	Leading project in modern organizations		1				15	60	2	0,5	T	Z		P	S	Ob	
9	ZMZ1244W	Marketing in the information society	2					30	120	4	1,0	T	E			S	Ob	
10	ZMZ1244C	Marketing in the information society		2				30	60	2	1,0	T	Z		P	S	Ob	
11	ZMZ1253W	Methods and Tools of Data Analysis	1					15	30	1	0,5	T	Z			S	Ob	
12	ZMZ1253L	Methods and Tools of Data Analysis			1			15	60	2	0,5	T	Z		P	S	Ob	
13	ZMZ1254W	Modern human resource management	2					30	60	2	1,0	T	Z			S	Ob	
14	ZMZ1254C	Modern human resource management		2				30	60	2	1,0	T	Z		P	S	Ob	
Total			11	8	1	0	0	300	810	27	10,0							

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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

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

⁷Optional – enter W, obligatory – enter Ob

4.2.4.2 Module.....(e.g. diploma profile) module (min. 23 ECTS points):

No.	Course/group of courses	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting -	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total łączna	BK classes			university-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	T	Z			S	W
		Razem	11	5	5	0	0		315	690	23	10,5						

Modules

No.	Course/group of courses	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting -	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total łączna	BK classes			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		Computer science module (2 semester)	1	2				45	120	4								
1	IEZ1208W	Data processing technology	1					15	60	2	0,5	T	Z			S	W	
2	IEZ1208L	Data processing technology		2				30	60	2	1,0	T	Z		P	S	W	
		Computer science module (3 semester)	2	2				60	120	4								
1	IEZ1211W	Programming applications	2					30	60	2	1,0	T	Z			S	W	
2	IEZ1211L	Programming applications		2				30	60	2	1,0	T	Z		P	S	W	
		Economic science module (3 semester)	2	1				45	120	4								
1	FBZ1187W	Financial Engineering	2					30	60	2	1,0	T	Z			S	W	
2	FBZ1187C	Financial Engineering		1				15	60	2	0,5	T	Z		P	S	W	
3	EKZ1166W	Market Structures and their Regulation	2					30	60	2	1,0	T	Z			S	W	
4	EKZ1166C	Market Structures and their Regulation		1				15	60	2	0,5	T	Z		P	S	W	
		Computer science module (4 semester)	2	1	1			60	120	4								

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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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⁷Optional – enter W, obligatory – enter Ob

1	IEZ1209W	Investigation of MIS requirements	1						15	30	1	0,5	T	Z			S	W
2	IEZ1209C	Investigation of MIS requirements		1					15	30	1	0,5	T	Z		P	S	W
3	IEZ1210W	Methods of management information systems modeling	1						15	30	1	0,5	T	Z			S	W
4	IEZ1210L	Methods of management information systems modeling			1				15	30	1	0,5	T	Z		P	S	W
		Legal science module (4 semester)	2	2					60	120	4							
1	PRZ1168W	Business on the EU market	1						15	30	1	0,5	T	Z			S	W
2	PRZ1168C	Business on the EU market		1					15	30	1	0,5	T	Z		P	S	W
3	PRZ1155W	International law	1						15	30	1	0,5	T	Z			S	W
4	PRZ1155C	International law		1					15	30	1	0,5	T	Z		P	S	W
		Computer science module (5 semester)	2		1				45	90	3							
1	IEZ1212W	Software project in management	2						30	60	2	1,0	T	Z			S	W
2	IEZ1212L	Software project in management			1				15	30	1	0,5	T	Z		P	S	W

Altogether for specialization modules:

Total 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				
22	13	6	0	0	615	1500	50	20,5

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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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⁷Optional – enter W, obligatory – enter Ob

4.3 Training module (Faculty Council resolution on principles of crediting training – attachment no. 4...)

Name of training			
Number of ECTS points	Number of ECTS points for BK classes ¹	Training crediting mode	Code
5	0	<p>1. A student must present at least one of the following documents:</p> <ul style="list-style-type: none"> - 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. <p>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.</p>	ZMZ2623Q
Training duration		Training objective	
4 weeks	<p>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:</p> <ul style="list-style-type: none"> - 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 		

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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

	<p>area of organizational activity, together with the socio-cultural function of an organization.</p> <p>A work placement is carried out according to a program set out in agreement with the place of work and covers the following elements:</p> <p>a) a description of the role to be carried out,</p> <p>b) the relation between the work placement and the student's studies:</p> <ul style="list-style-type: none"> - 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.
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4.4 Diploma dissertation module

Type of diploma dissertation	Licencjat	
Number of diploma dissertation semesters	Number of ECTS points	Code
2	1 14	ZMZ1250S Diploma seminar ZMZ1256D Bachelor thesis
Character of diploma dissertation		
diagnostic or design		
Number of BK ¹ ECTS points	15	

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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

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

⁷Optional – enter W, obligatory – enter Ob

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
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
diploma thesis	Written report satisfying the current regulations for diploma theses, assessed by the supervisor and a reviewer using an appropriate form.
diploma 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 BK¹)

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

...180 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	74
Number of ECTS points for optional subjects	25
Total number of ECTS points	99

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)

...11.... ECTS points

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

...51.... ECTS points

11. Range of diploma dissertation

Character of effect/ issue	EXAM QUESTION
---------------------------------------	----------------------

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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

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 for comparing economies and their usefulness in making decisions at the level of enterprises. 5. The Program of the Single European Market and its influence on the activities of enterprises. 6. Markets and their elements according to classical and liberal economics. 7. Market structures - perfect competition, monopolistic competition, oligopoly, monopoly 8. Theory of the regulatory actions made by government (e.g. the theory of market failures).
K1_ZARZ_W04	9. The essence and features of commercial law. Subjects of commercial law. 10. Protection of rights, including intellectual property, in the market operations of an enterprise. 11. Legislative protection of competition and of consumers. 12. Creating and liquidating enterprises. Bankruptcy proceedings and rectification proceedings. 13. Intellectual property –its essence, elements, licence agreements as an instrument of the commercialization of intellectual property.
K1_ZARZ_W05	14. An organization’s life-cycle – phases and its determinants 15. Elements of an 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 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 dimensions. 20. An enterprise’s cooperation with other entities: the essence and forms of cooperation, cooperatives and alliances..
K1_ZARZ_W07	21. The essence, aims and functions of management 22. Management methods and techniques - classification criteria, examples of the application of selected methods or techniques. 23. Management as an 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 processes. 27. The functional and process forms of the organization of an enterprise. 28. Models and standardization of processes. Methods of evaluating processes.

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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

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

⁷Optional – enter W, obligatory – enter Ob

K1_ZARZ_W10	29. Aims, phases and tools of marketing management. 30. The marketing-mix as a concept for influencing the market 31. The scope and functioning of marketing research, its procedures and methods.
K1_ZARZ_W11	32. Applied financial analysis – assessment of liquidity, profitability, assets and equity structure 33. Capital investment – material and cash investments. Methods of evaluating the productivity of investments. 34. Company assets and capital – balance sheet. Revenue and expenditure – financial results. Cash flow statement. 35. The fundamentals of bookkeeping. Accounting. 36. The sources and rules of financing a firm’s activities.
K1_ZARZ_W12	37. Periodic evaluation of employees and their professional development – goals, principles, procedures. 38. Job appraisal (essence, aims, methods) and wages (wage tables, wage forms, wage functions). 39. Principles of creating teams; the role of teams in organizations and the factors influencing their efficiency.
K1_ZARZ_W13	40. Goals and strategies of production management in a market economy. 41. Systems and processes of production and services – methods of production management.
K1_ZARZ_W14	42. The essence of logistics, its fundamentals and levels of integration of logistic processes. 43. Management, planning and organization of logistic processes 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. Costs of quality control. 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 an enterprise’s activities - examples of applications in various functional areas. 48. Popular methods of evaluating and selecting solutions to problems faced by organizations.
K1_ZARZ_W17	49. Leadership as goal attainment. The influence of motivation on human behaviour. 50. The essence of motivation and motivating. Theories of motivation and their characteristics. 51. Processes of social integration in an organization.
K1_ZARZ_W18	52. Interpersonal conflicts – within and between groups. Group cohesion. 53. Organizational culture and the ethics of organizational behavior. 54. Sources and manifestations of power in an organization. Authority, influence, coalitions. leadership.
K1_ZARZ_W19	55. Forces that generate changes in an enterprise - models of managing change. 56. Process of implementing changes in an organization - the sources of resistance to change and ways to neutralize them.

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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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⁷Optional – enter W, obligatory – enter Ob

K1_ZARZ_W20	57. The definition and initiation of projects. Evaluation of project feasibility. Analysis of project risk. Project structure. 58. The essence and roles of projects in management. The essence and types of projects. Project life cycle. 59. Project realization and resource planning. Project budgeting. Managing the realization of a project. Organization of a project team.
K1_ZARZ_W21	60. The essence and types of entrepreneurship, determinants of its initiation and development. 61. The essence and types of innovation, organisations and institutions supporting the diffusion of innovation.
K1_ZARZ_W22	62. The influence of the physical environment at work on employees
K1_ZARZ_W23	63. Mathematical methods applied in management – examples of applications
K1_ZARZ_W24	64. Multicriteria 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 trends – examples of applications. 67. Classical linear regression models – examples of applications in management
K1_ZARZ_W26	68. Process of implementing and exploiting information systems in management. 69. The design of management information systems: assumptions, phases, rules and tools. 70. Assumptions and aims of an enterprise's strategy for applying computerization.

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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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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⁷Optional – 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

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