No.	Symbols of effects of education on the major	EFFECTS OF EDUCATION THE MAJOR First degree studies After graduation from the first degree studies, major:  Management graduate:	Reference to the description of the effects of education for the field of social sciences
		KNOWLEDGE	
1.	K1_ZARZ_W01	Explains the nature and the place of economic sciences in the system of sciences as well as their relations with others social and technical sciences. Explains the origin and evolution of economic sciences, including management sciences.	S1A_W01 S1A_W09
2.	K1_ZARZ_W02	Arranges and systematises basic knowledge of various economic sciences. Distinguishes and characterises basic types of economic systems and their elements.	S1A_W01 S1A_W02
3.	K1_ZARZ_W03	Knows and explains the content of basic economic terms, laws and dependencies in the microeconomic and the macroeconomic scale. Characterises major theories of economics. Knows basic purposes and institutions of market economy and their functions.	S1A_W02 S1A_W03
4.	K1_ZARZ_W04	Understands basic legal regulations governing establishment and functioning of an economic organisation. Knows and understands basic notions and principles of industrial property protection and copyright.	S1A_W07 S1A_W10
5.	K1_ZARZ_W05	Distinguishes and characterises basic types, types and forms of organisation, identifies their objectives and other elements. Explains key concepts of the theory of organisation with regard to their formation, functioning, transformation and development.	S1A_W02 S1A_W08 S1A_W09
6.	K1_ZARZ_W06	Identifies inter-organisational relations and interactions of an organisation with the environment in the context of national, international and intercultural determinants. Explains and illustrates the influence of the environmental impact on activities of an organisation.	S1A_W03 S1A_W07
7.	K1_ZARZ_W07	Explains the essence of management, knows basic trends (schools) in theory of organisation and management. Recognises conceptual basics of management, interprets functions of management. Distinguishes basic classification criteria of management methods and techniques. Describes selected management methods and techniques.	S1A_W06 S1A_W09
8.	K1_ZARZ_W08	Basic knowledge regarding organisational structures, structure-making factors and their shaping processes.	S1A_W02 S1A_W06 S1A_W07 S1A_W08
9.	K1_ZARZ_W09	Identifies functional areas of an enterprise, relations between them as well as key factors shaping effectiveness and efficiency of operations implemented in those functional areas.	S1A_W02

10.	K1_ZARZ_W10	Describes basic notions, identifies problems, characterises methods and tools of marketing and sales. Knows and	S1A_W02
		explains the essence and phases of marketing management of an organisation. Classifies and characterises	S1A_W04
		consumer behaviour.	S1A_W05
			S1A_W06
11.	K1_ZARZ_W11	Knows and characterises elements financial system. Basic knowledge of accounting, corporate finance and	S1A_W02
		finance management. Knows standards of financial reporting and methods of evaluation of economic and financial	S1A_W06
		situation of organisation as well as investment efficiency calculus.	S1A_W07
12.	K1_ZARZ_W12	Basic knowledge of human resources in an organisation and their strategic nature. Knows objectives, elements and	S1A_W02
		determinants of staff management process and characterises their mutual relations. Indicates and classifies	S1A_W04
		instruments of selection, motivating, development, evaluation, rewarding employees; knows the principles of their	S1A_W05
		effective use.	S1A_W06
		chective use.	S1A_W07
13.	K1_ZARZ_W13	Knows basic notions and tools of management of production and services. Basic knowledge of functioning of	S1A_W02
		production systems and processes. Knows basic production and service management methods.	S1A_W06
		production systems and processes. Knows basic production and service management methods.	S1A_W07
14.	K1_ZARZ_W14	Basic knowledge of logistic systems and processes; recognises their elements. Knows objectives and functions of	S1A_W02
		logistics in an organisation and supply chain.	S1A_W06
			S1A_W07
15.	K1_ZARZ_W15	Explains the essence and meaning of issues of quality in management, knows basic notions, objectives,	S1A_W02
		regularities and problems of quality management. Identifies the areas improvement of the quality of resources,	S1A_W06
		structures, processes, procedures and their determinants and, as a result, - quality of products and services.	S1A_W07
		Understands the idea standardisation and certification in an organisation.	
16.	K1_ZARZ_W16	Basic knowledge of methods and techniques of diagnosing and improvement in particular areas of operations of	S1A_W02
		functional organisations as well as selected methods of examination of the environment of an enterprise. Knows	S1A_W03
		basic norms and standards in particular functional areas.	S1A_W06
			S1A_W07
17.	K1_ZARZ_W17	Basic knowledge of psychology and sociology of organisation. Interprets basic concepts of a person and explains	S1A_W04
		motivation theories. Characterises the essence and determinants of leadership.	S1A_W05
18.	K1_ZARZ_W18	Basic knowledge of regularities of organisational behaviors and their determinants. Knows the principles of	S1A_W04
		building and functioning of teams and factors affecting their efficiency. Describes the notion of organisational	S1A_W05
		culture and its importance in management. Knows basic measures and systems of communication in organisations	S1A_W06
		and characteristics of efficient communication process.	2111_1100

19.	K1_ZARZ_W19	Explains the essence of change management in an organisation, indicates the sources of resistance against changes	S1A_W04
		and ways of neutralising them.	S1A_W05
			S1A_W06
			S1A_W08
20.	K1_ZARZ_W20	Explains the essence, objectives and principles of project management. Knows methodology and instruments of project management.	S1A_W06
21.	K1_ZARZ_W21	Explains the notion of innovation and distinguishes its types. Recognises characteristics and determinants of	S1A_W05
		innovativeness of an organisation. Describes innovative process occurring within an organisation. Characterises	S1A_W11
		the essence and forms of entrepreneurship and identifies the premises of its formation and development.	S1A_W08
22.	K1_ZARZ_W22	Knows basic rules of physics, explains the impact of material work environment on the encumbrance of an	S1A_W06
		employee.	S1A_W07
23.	K1_ZARZ_W23	Knows calculus of vectors and matrix calculus. Basic knowledge of mathematical analysis: function extremum,	S1A_W06
		differential and integral calculus, functions of one and many variables. Basic knowledge of differential equations.	
		Knows methods mathematical used in economics and in management sciences.	
24.	K1_ZARZ_W24	Knowledge with regard to construction and application of mathematical and IT tools in various functional fields	S1A_W02
		of an organisation.	S1A_W06
25.	K1_ZARZ_W25	Knows basic statistical methods and IT tools of collection, analysis and presentation of data describing economic	S1A_W06
		and social processes.	31A_W00
26.	K1_ZARZ_W26	Knows basic characteristics of IT management systems and basics of construction of classification of those	S1A_W02
		systems. Describes basic elements of methodologies of building and implementation of IT management systems.	
27.	K1_ZARZ_W27	Deepened knowledge within the specialty:	
		- Enterprise management (ZP)- Appendix no. 1	
		- Organisational Management (OM) – Appendix no. 2	

No.	Symbols of effects of education on the major	EFFECTS OF EDUCATION First degree studies After graduation from the first degree studies, major:  Management graduate:	Reference to the description of the effects of education for the field of social sciences		
	SKILLS				

1.	K1_ZARZ_U01	Able to initiate business operations, selects organisational and legal form, formulates organisational objectives and	S1A_U05
		prepares actions designed to attain them efficiently.	S1A_U06
2.	K1_ZARZ_U02	Able to analyse and evaluate objectives, characteristics, elements, processes, functional areas in an organisation	S1A_U02
		and internal and inter-organisational relations using basic notions and theoretical perspectives related to economic	S1A_U03
		sciences.	S1A_U08
			S1A_U01
3.	K1_ZARZ_U03	Ability to analyse causes and dynamics of phenomena in an organisation and its environment. Able to identify and	S1A_U02
		analyse typical management and substantive problems in an organisation and in its functional areas.	S1A_U03
			S1A_U08
4.	K1_ZARZ_U04	Able to select sources of information and use them in solving typical management and substantive problems in an organisation and its functional areas.	S1A_U02
5.	K1_ZARZ_U05	Able to use indicated methods and tools (including mathematical, statistical, IT) to identify, analyse and solve	S1A_U02
		typical management and substantive problems in an organisation and in its functional areas.	S1A_U03
6.	K1_ZARZ_U06	Able to use normative systems and applies indicated relevant norms and standards (legal, professional, moral) in	S1A_U05
		specific activities in an organisation.	
7.	K1_ZARZ_U07	Able to formulate alternative solutions of typical management and substantive problems in an organisation and in	S1A_U02
		its particular functional areas. Able to justify, select and verify solutions according to the set priorities.	S1A_U03
			S1A_U05
			S1A_U06
			S1A_U07
8.	K1_ZARZ_U08	Able to apply the principles of and instruments of efficient planning and resource management in order to perform individual and team tasks.	S1A_U08
9.	K1_ZARZ_U09	Ability to prepare change management plans in an organisation and select methods of management of typical	S1A_U06
		plans of changes in an organisation.	S1A_U07
10.	K1_ZARZ_U10	Able to identify, interpret and evaluate behaviour of the members of an organisation and use typical techniques of influence on those behaviours.	S1A_U08
11.	K1_ZARZ_U11	Able to use indicated methods and techniques as well as measures of evaluation and forecasting of results of	S1A_U02
		operations in an organisation.	S1A_U04
12.	K1_ZARZ_U12	Able to select and develop simple IT instruments supporting solutions for typical management and substantive	S1A_U02
		problems in an organisation and in its particular functional areas	S1A_U03
13.	K1_ZARZ_U13	Applies theoretical knowledge from the field of physics in order to optimise working conditions taking account of	S1A_U07
		its material environment.	S1A_U06

14.	K1_ZARZ_U14	Possesses elementary research skills making it possible to analyse examples of research as well as conducting	S1A_U01
		simple research in the field of management sciences; able to formulate conclusions, prepare and present the results	S1A_U02
		and indicate the directions of further research.	
15.	K1_ZARZ_U15	Able to use various Polish and foreign language sources of information on their own, particularly in professional literature. Able to integrate acquired information and use it in order to deepen their specialist knowledge associated with the field of social sciences and the discipline of management sciences.	S1A_U09 S1A_U10
16.	K1_ZARZ_U16	Understands listened and read texts on general and scientific topics associated with the field of social sciences and	S1A_U09
		the discipline of management sciences. Able to present statements (oral and written), participate in discussions	S1A_U10
		and present their opinions in an international professional environment - in a foreign language.	S1A_U11
17.	K1_ZARZ_U17	Possesses expanded skills within the specialty:	
		- Enterprise management (ZP)- Appendix no. 1	
		- Organisational Management (OM) – Appendix no. 2	

No.	Symbols of effects of education on the major	EFFECTS OF EDUCATION First degree studies After graduation from the first degree studies, major:  Management graduate:	Reference to the description of the effects of education for the field of social sciences
		SOCIAL COMPETENCES	
1.	K1_ZARZ_K01	Aware of the need for unassisted development of their knowledge and professional skills within organisation and management sciences. Able to develop this knowledge and improve skills on their own.	S1A_K01 S1A_K06
2.	K1_ZARZ_K02	Able to cooperate and work in group and team forms of work organisation (assuming different roles in them).  Able to organise work of small teams and to manage them.	S1A_K02
3.	K1_ZARZ_K03	Prepared to assume responsibility for entrusted tasks. Able to properly define priorities in own work and in cooperation with others in connection with performing various organisational roles.	S1A_K03 S1A_K04 S1A_K07
4.	K1_ZARZ_K04	Prepared to identify and analyse social problems at the workplace. Able to flexibly seek methods of solving them.	S1A_K04 S1A_K07
5.	K1_ZARZ_K05	Prepared to initiate changes at the workplace and participate in their planning and implementation. Able to think and act in an enterprising manner.	S1A_K07 S1A_K05
6.	K1_ZARZ_K06	Prepared to communicate, persuade and defend their views in order to achieve common goals. Prepared to behave in a professional and ethical manner.	S1A_K03 S1A_K04 S1A_K05

Appendix no. 2

## EFFECTS OF EDUCATION FOR THE SPECIALISATION ORGANISATIONAL MANAGEMENT (OM)

DEPARTMENT OF COMPUTER SCIENCE AND MANAGEMENT

**Study major: MANAGEMENT** 

**Degree of the studies: FIRST DEGREE STUDIES** 

**Specialization: ORGANISATIONAL MANAGEMENT (OM)** 

No.	Effects of education on the 1st degree of the studies, specialty: OM	EFFECTS OF EDUCATION First degree studies After graduation from the first degree studies, major:  Management, specialty OM - the graduate can be characterised with the following knowledge and abilities:	Reference to the description of the effects of education for the field of social sciences
		KNOWLEDGE	
1.	S1_ZARZ_OM_W01	Knows and explains the scope and type of information contained in accounting books and financial statements	
		and knows how to use and process them to make them the basis for making decisions at the strategic, tactical	S1A_W06
		and operational level.	S1A_W07
2.	S1_ZARZ_OM_W02	Knows elements of PRINCE 2 methodology and agile methodologies of project management.	S1A_W06
3.	S1_ZARZ_OM_W03		
		challenges related to the development of information society, development of new communication	S1A_W04
		technologies and emergence of a new type of consumers (prosumers).	S1A_W05
			S1A_W06
4.	S1_ZARZ_OM_W04		S1A_W02
		ways of remuneration, personal marketing and personal controlling.	S1A_W04
			S1A_W05
			S1A_W06
			S1A_W07

5.	S1_ZARZ_OM_W05	Knows the idea and principles of TQM, procedures, processes and funds necessary to implement and improve	S1A_W02
		a quality management system. Knows and understands methods, techniques and tools of quality management.	S1A_W06
		Knows standardistation organisations and standardised quality management systems. Knows the requirements	S1A_W07
		of quality management standard ISO 9001. Knows procedures of auditing and certification of quality	
		management system.	
6.	S1_ZARZ_OM_W06	Knows methods of conducting system analysis, including examining the needs of users. Knowledge	S1A_W02
		concerning methods of improvement of processes as well as planning IT systems.	S1A_W06
7.	S1_ZARZ_OM_W07	Knows basic rules of physics related to material working environment. Knows the sources of standards and	S1A_W05
		legal regulations determining acceptable parameters of factors of material work environment. Aware of the	S1A_W06
		impact of factors of work environment on the encumbrance of an employee.	S1A_W07
8.	S1_ZARZ_OM_W08	Basic knowledge of risk analysis in decision-making processes. Understands the meaning and knows basic	S1A_W02
		methods of identification, measurement and management of risk in financial institutions and an enterprise in	S1A_W03
		uncertain situations.	S1A_W06
			S1A_W07
9.	S1_ZARZ_OM_W09	Knows modern methods and tools of generation of association rules for the needs of decision-making	S1A_W02
		processes.	S1A_W06
10.	S1_ZARZ_OM_W10	Knows diagnostic, prognostic, systemic and heurystic methodologies of organisational conduct, useful for	S1A_W06
		solving problems with regard to existing and newly designed organisation/enterprise.	S1A_W09
			S1A_W02
			S1A_W07
			S1A_W03

]	No.	Effects of education on the 1st degree of the studies, specialty: OM	EFFECTS OF EDUCATION  First degree studies  After graduation from the first degree studies, major:  Management, specialty OM - the graduate can be characterised with the following knowledge and abilities:	Reference to the description of the effects of education in the field of social sciences
			SKILLS	
2	28.	S1_ZARZ_OM_U01	Able to properly process and use information from financial accounting in decision-making in organisations –	S1A_U02
			decisions concerning assortment, prices, suppliers, customers etc.	
2	29.	S1_ZARZ_OM_U02	Able to use elements of PRINCE2 methodology and agile methodologies in practice as a project team	S1A_U08
			member.	

30.	S1_ZARZ_OM_U03	Able to identify, interpret and assess civilisation, technological and cultural changes occurring in an	S1A_U02
		organisation and its environment as well as use acquired knowledge for solving management and marketing	S1A_U03
		problems in an organisation.	S1A_U08
31.	S1_ZARZ_OM_U04	Able to use innovative methods and tools of human resource management to solve typical substantive	S1A_U02
		problems in this field.	S1A_U03
32.	S1_ZARZ_OM_U05	Able to identify and document the needs of IT systems users as well as identify problems associated with	S1A_U02
		processing information in an organisation and suggest relevant improvement measures.	S1A_U03
			S1A_U08
			S1A_U01
33.	S1_ZARZ_OM_U06	Able to use methods, techniques and tools of quality management to analyse problems in an organisation and	S1A_U02
		to solve them. Able to interpret the requirements of standard ISO 9001 and prepare plans of implementation of	S1A_U03
		quality management systems.	
34.	S1_ZARZ_OM_U07	Applies theoretical knowledge from the field of physics in order to optimise working conditions taking	S1A_U05
		account of its material environment. Able to assess the impact of factors of material work environment on the	S1A_U06
		encumbrance of an employee and minimise negative impact of those factors on the employee's organism.	S1A_U07
35.	S1_ZARZ_OM_U08	Identifies risk in decision-making processes in different areas of financial system. Able to use basic methods	S1A_U02
		of risk measurement and management.	S1A_U03
			S1A_U05
			S1A_U06
			S1A_U07
			S1A_U01
36.	S1_ZARZ_OM_U09	Able to generate association rules for the needs of innovative processes for the needs of decision-making	
		processes in an organisation using modern data analysis methods and tools.	S1A_U03
37.	S1_ZARZ_OM_U10	Able to diagnose problems found in an enterprise, use efficient methods of improvement of organisation and	
		operations of an enterprise	S1A_U03
			S1A_U08