

Name of the direction: BUSINESS ANALYTICS AND DATA SCIENCE

Profile - general academic ¹

Study level : first degree²

Field: social sciences, sciences and natural sciences, **scientific discipline:** management and quality sciences 51%, economics and finance 30%, computer science 19%³

Level of the Polish Qualification Framework-Level 6⁴

Symbols of effects	Learning outcomes	Reference to universal PRK characteristics ⁵	Reference to the second-level characteristics of the PRK for the relevant level ⁶
1	2	3	4
	KNOWLEDGE: GRADUATE KNOWS AND UNDERSTANDS	Ingredient code description	Component code description
K_W01	Advanced issues of management science and quality and their location in the system of social sciences and relations with other fields of knowledge, including interdisciplinary relationships with business analytics and data sciences	P6U_W	P6S_WG
K_W02	Advanced concepts of the specifics and achievements of business analytics, including the latest trends and innovations, and their impact on different fields of knowledge	P6U_W	P6S_WG
K_W03	Advanced economic and financial phenomena at the local and international level, using tools analytical and econometric models	P6U_W	P6S_WG

¹ Insert appropriate: general academic or practical

² Enter the appropriate: first degree, second degree or unified master's degree.

³ Enter in accordance with the Regulation of the Minister of Science and Higher Education.

The direction should be assigned to at least 1 discipline. If the major is assigned to more than 1 discipline, indicate the leading discipline in which more than half of the learning outcomes will be obtained (calculated by ECTS points). The % share of each field and discipline should be indicated.

⁴ Enter the appropriate: first degree - level 6, second degree or unified master's degree - level 7.

⁵ Refer to the relevant PRK level 6-8 in accordance with the annex to the Law of December 22, 2015 *on the Integrated Qualification System*

⁶ Reference to the characteristics of second-degree learning outcomes for qualifications at levels 6-8 of the Polish Qualification Framework typical for qualifications obtained within the system of higher education and science after obtaining a full qualification at level 4 - in accordance with the Regulation of the Minister of Science and Higher Education of November 14, 2018 *on characteristics of second-degree learning outcomes for qualifications at levels 6-8 of the Polish Qualification Framework*. In the case of engineering studies, they should also take into account the possibility of obtaining all engineering competencies referred to in Part III of the Regulation. Learning outcomes for arts majors should also include references to part II of the regulation.

K_W04	The characteristics of human beings as economic agents and the mechanisms of their functioning in groups, organizations and institutions	P6U_W	P6S_WK
K_W05	in an advanced degree, the types of social ties, relationships and conditions distinguished in management and quality sciences and the basic mechanisms affecting the behavior of the consumer, employee, entrepreneur and organization	P6U_W	P6S_WG
K_W06	in an advanced degree mathematical, statistical and econometric methods necessary for the analysis of economic and social phenomena on a micro- and macroeconomic scale	P6U_W	P6S_WK
K_W07	in an advanced degree the tools of collection, processing, analysis and presentation of economic data and the possibilities of their application in economic practice	P6U_W	P6S_WG
K_W08	principles of management of organizations, mechanisms of functioning of business entities, as well as methods and tools for evaluating the efficiency and effectiveness of their operations	P6U_W	P6S_WK
K_W09	Legal and ethical norms and organizational rules that determine the proper and efficient functioning of social and economic structures, on a macro and microeconomic scale, taking into account data and privacy regulations	P6U_W	P6S_WK
K_W10	fundamental dilemmas of the modern economy and the whole civilization at the level of the enterprise, industry, national, European and world economies, in the context of globalization and sustainable development	P6U_W	P6S_WK
K_W11	to an advanced degree, the principles of preparing and analyzing income and expenses in enterprises and financial institutions, used in preparing reports and making management decisions, taking into account the principles of management and financial accounting	P6U_W	P6S_WG
K_W12	basic concepts and principles of industrial property protection, copyright law and independent writing works, taking into account research and scientific ethics.	P6U_W	P6S_WK
K_W13	the methodology of constructing written works, including diploma works, and the principles of creating different types of statements oral with the use of computerized methods of obtaining, processing and exchanging information	P6U_W	P6S_WK
K_W14	principles for the creation and development of various forms of entrepreneurship, including development and innovation strategies, with Using strategic analysis and business modeling tools.	P6U_W	P6S_WK

	SKILLS: A GRADUATE CAN	Ingredient code description	Component code description
K_U01	use the acquired knowledge to analyze and correctly interpret economic, social, economic and financial phenomena and processes	P6U_U	P6S_UW
K_U02	apply modern technologies to acquire, process and analyze large data sets to identify trends, patterns and anomalies in socio-economic phenomena	P6U_U	P6S_UK
K_U03	use the basic theoretical knowledge to formulate, analyze and solve complex and unusual economic and financial problems, including economic forecasts, through the proper selection of sources, critical evaluation of the acquired information, its analysis and synthesis	P6U_U	P6S_UW
K_U04	perform tasks under typical, non-standard and not fully predictable conditions, identifying the level of risk and minimizing its impact, and selecting appropriate methods, tools and technologies	P6U_U	P6S_UO
K_U05	present the results of business analysis in a way that is understandable to different audiences, taking into account specialized analytical terminology	P6U_U	P6S_UW, P6S_UK
K_U06	correctly use norms and standards in the processes of planning, organizing, motivating and controlling business activities	P6U_U	P6S_UW, P6S_UK
K_U07	take into account in the actions taken their various conditions (economic, financial, legal, organizational, social, etc.) and analyze and evaluate their actions in the context of these conditions, as well as act as a team in the context of these conditions	P6U_U	P6S_UK
K_U08	formulate and express their own views, engage in discussion and participate in debates on key economic problems and dilemmas of the modern economy	P6U_U	P6S_UK
K_U09	Is able to use modern data visualization tools to present analysis results and conclusions using information technology	P6U_U	P6S_UK
K_U10	prepare a written paper on a selected business problem including a thesis that is a solution to a specific problem using methods and tools from the field of business analytics	P6U_U	P6S_UW
K_U11	use a foreign language in accordance with the requirements specified for level B2 of the Common European Framework of Reference for Languages	P6U_U	P6S_UK

K_U12	use advanced ICT for acquiring, processing and communicating information in the field of the studied discipline	P6U_U	P6S_UW
K_U13	Effectively plan, organize and execute analytical projects, both individually and as part of a team, r e l y i n g on basic business analysis tools and techniques	P6U_U	P6S_UO
K_U14	independently plan and implement their own learning, adapting to the dynamically changing needs of the market work, especially in the context of continuous development in the field of business analytics	P6U_U	P6S_UU
SOCIAL COMPETENCE: THE GRADUATE IS READY TO		Ingredient code description	Code component of the description
K_K01	critically evaluate their own knowledge and responsibly prepare for their work, complement and improve the acquired knowledge and skills, extended by the interdisciplinary dimension, using a variety of sources, methods and techniques of self-education, taking into account the latest trends in the field of business analytics	P6U_K	P6S_KK
K_K02	resolve dilemmas related to the profession, using appropriate advanced data analysis tools, and in case of difficulties is ready to consult experts and consult with the project team	P6U_K	P6S_KK, P6S_KR
K_K03	work in teams, organizations and institutions and responsibly perform a variety of social and organizational roles, adapting to dynamic changes in the business environment and taking initiatives to analyze and optimize business processes	P6U_K	P6S_KK, P6S_KO
K_K04	Actively participate in the preparation of socio-economic projects, including those undertaken for the benefit of the social environment and the public interest, taking into account the analysis of market trends and forecasting future market needs	P6U_K	P6S_KK, P6S_KO, P6S_KR
K_K05	Thinking and acting in an entrepreneurial manner, identifying new opportunities in the market and applying innovative methods of data analysis to create value for the business	P6U_K	P6S_KO
K_K06	behave in a professional manner and adhere to the professional ethics of a business analyst and demanding it of others	P6U_K	P6U_KR
K_K07	Recognize and cherish the achievements and professional traditions of the work of a business analyst and Data Science specialist, Which is reflected in his professional conduct and decisions	P6U_K	P6U_KR