

BUSINESS INFORMATICS	
Poziom kształcenia	studia pierwszego stopnia
Język kształcenia	angielski
Profil kształcenia	ogólnoakademicki
Forma studiów	studia stacjonarne
Liczba semestrów	6
Liczba punktów ECTS konieczna do ukończenia studiów	180 ECTS
Liczba godzin	studia stacjonarne – 1898 h
Tytuł zawodowy uzyskiwany przez absolwenta	licencjat
Przyporządkowanie do właściwej dziedziny nauki	nauki społeczne
Dyscypliny naukowe, do których odnoszą się efekty uczenia się	nauki o zarządzaniu i jakości (dyscyplina wiodąca) – 54% informatyka – 38% ekonomia i finanse – 8%
Łączna liczba punktów ECTS, jaką student musi uzyskać w ramach zajęć prowadzonych z bezpośrednim udziałem nauczycieli akademickich lub innych osób prowadzących zajęcia	90 ECTS
Zajęcia lub grupy zajęć, niezależnie od formy ich prowadzenia, wraz z przypisaniem do nich efektów uczenia się i treści programowych zapewniających uzyskanie tych efektów	wykaz znajduje się w elektronicznym systemie dostępnym pod adresem https://ue.e-sylabus.pl
Sposoby weryfikacji i oceny efektów uczenia się osiągniętych przez studenta w trakcie cyklu kształcenia	egzamin, prace kontrolne, projekty, aktywność, praca własna studenta
Wymiar, zasady i forma odbywania praktyk zawodowych oraz liczba punktów ECTS, jaką student musi uzyskać w ramach tych praktyk	program studiów nie przewiduje odbywania praktyk zawodowych przez studentów
Liczba punktów ECTS, jaką student musi uzyskać w ramach zajęć z dziedziny nauk humanistycznych	6

Program studiów umożliwia studentowi wybór zajęć, którym przypisano punkty ECTS w wymiarze nie mniejszym niż 30 % punktów ECTS tj. 54 ECTS.

Program studiów obejmuje zajęcia związane z prowadzoną w uczelni działalnością naukową w dyscyplinie lub dyscyplinach, do których przyporządkowany jest kierunek studiów, w wymiarze większym niż 50% liczby punktów ECTS tj. 90 ECTS i uwzględnia udział studentów w zajęciach przygotowujących do prowadzenia działalności naukowej lub udział w tej działalności.

Efekty uczenia się na kierunku *Business Informatics*

Kod efektu uczenia się (kierunek)	Efekty uczenia się Po ukończeniu studiów pierwszego stopnia o profilu ogólnoakademickim na kierunku studiów Business Informatics absolwent (the graduate):	Odniesienie do Polskiej Ramy Kwalifikacji
WIEDZA/KNOWLEDGE		
K_W01	knows and understands at an advanced level contemporary trends and directions of development of sciences on management and quality as well as economics and finance as well as the role and importance of these sciences in the area of social sciences.	P6S_WK; P6S_WG
K_W02	knows and understands at an advanced level mathematical, statistical, and econometric methods and tools necessary to analyse economic phenomena, as well as to make rational decisions in all types of entities and economic organizations.	P6S_WG
K_W03	knows and understands at an advanced level the functionality and IT solutions to collect, analyse and present economic, financial, and social data.	P6S_WG
K_W04	knows and understands at an advanced level methods, techniques, tools, and IT solutions including data collection and processing as well as information systems architecture and their security.	P6S_WG
K_W05	knows and understands at an advanced level methods, techniques, principles of software engineering and creation of information systems (i.e., analysis, modelling, designing, programming, testing, validation, implementation) for the needs of various entities and organizations. The graduate can see the effects of these activities in the functioning of the organization.	P6S_WK; P6S_WG
K_W06	knows and understands at an advanced level the methods, techniques, and principles regarding IT project management for the needs of various types of entities and organizations. The graduate can assess the impact of project implementation on stakeholders.	P6S_WK; P6S_WG
K_W07	knows and understands at an advanced level the scope of mechanisms of human behaviour and the influence of man and social groups on the organization.	P6S_WG
K_W08	knows and understands at an advanced level information and communication technologies and their development trends.	P6S_WK; P6S_WG
K_W09	knows and understands at an advanced level the essence and significance of the law, norms, and standards (including ethical ones) applicable to the operations of enterprises. He knows the rules and conditions related to the development of various forms of entrepreneurship.	P6S_WK; P6S_WG
UMIĘTNOŚCI/SKILLS		
K_U01	can apply theoretical and practical knowledge in individual areas of the organization in the field of identifying, diagnosing, and solving decision problems.	P6S_UW
K_U02	can apply theoretical and practical knowledge concerning the implementation of IT systems and advanced ICT solutions in the field of analysis, modeling, design, programming, implementation, and management of the implementation of an IT project.	P6S_UW

K_U03	examines and identifies phenomena and processes related to the implementation of widely understood ICT solutions in the organization and its environment, can describe, analyze, and interpret them using appropriate concepts and theories, obtaining information from various sources, also in a foreign language.	P6S_UW;
K_U04	examines and identifies phenomena and processes related to the implementation of widely understood ICT solutions in the organization and its environment, can describe, analyze, and interpret them using appropriate concepts and theories, obtaining information from various sources, also in a foreign language.	P6S_UW
K_U05	can communicate with the environment using terminology in the field of management and quality sciences as well as IT, as well as to take part in the debate and present his own position in the discussion with the use of a foreign language at B2 level of the European System of Language Description.	P6S_UK
K_U06	can plan and organize own and teamwork and cooperate in the implementation of entrusted tasks, considering ethical and socio-cultural aspects.	P6S_UO
K_U07	can independently and continuously acquire knowledge and improve skills using modern self-learning tools.	P6S_UU
KOMPETENCJE SPOŁECZNE/SOCIAL COMPETENCES		
K_K01	is ready to critically evaluate and supplement his knowledge in the field of management and quality sciences as well as computer science.	P6S_KK
K_K02	is ready to act in an entrepreneurial way, also in the interest of the public, respecting the principles of corporate social responsibility.	P6S_KO
K_K03	is ready to act in accordance with applicable law and ethical standards within the framework of designated professional, organizational and social roles.	P6S_KR

2024/2025 - 2026/2027 BUSINESS INFORMATICS FIRST CYCLE	Total Exam	Full-time studies					Part-time studies					E C T S
		Total hours	L	T	CL	S	Total hours	L	T	CL	S	
winter 2024/2025 - Semester 1	4	304	154	105	45	0	0	0	0	0	0	30
summer 2024/2025 - Semester 2	4	330	135	120	75	0	0	0	0	0	0	30
winter 2025/2026 - Semester 3	3	330	135	75	120	0	0	0	0	0	0	30
summer 2025/2026 - Semester 4	3	364	150	120	94	0	0	0	0	0	0	30
winter 2026/2027 - Semester 5	0	330	120	60	120	30	0	0	0	0	0	30
summer 2026/2027 - Semester 6	0	240	120	30	60	30	0	0	0	0	0	30

Course	Sem.	Credit form	Full-time studies					Part-time studies					E C T S
			Total hours	L	T	CL	S	Total hours	L	T	CL	S	
SECTION I. GENERAL COURSES - OBLIGATORY													
Introduction to Microeconomics	II	Exam	30	15	15							3	
Introduction to Macroeconomics	II	Grade	30	15	15							3	
Finance	II	Exam	30	15	15							3	
Accounting	I	Exam	30	15	15							3	
Management	I	Exam	60	30	30							6	
Mathematics	I	Exam	60	30	30							6	
Law	I	Grade	30	30								3	
Information Technologies	I	Grade	30			30						3	
Introduction to Research Methods	IV	Grade	15	15								2	
TOTAL SECTION I			315	165	120	30	0	0	0	0	0	32	
SECTION II. OBLIGATORY COURSES													
Introduction to Computer Science	I	Grade	30	15		15						3	
Fundamentals of Information Systems	II	Exam	90	45	15	30						9	
Statistics	III	Exam	60	30	15	15						6	
System Analysis and Design	III	Exam	90	45		45						8	
Databases	III	Exam	60	30		30						6	
IT Project Management	IV	Exam	75	30	15	30						6	
TOTAL SECTION II			405	195	45	165	0	0	0	0	0	38	

Course	Sem.	Credit form	Full-time studies					Part-time studies					E C T S	
			Total hours	L	T	CL	S	Total hours	L	T	CL	S		
SECTION III. OPTIONAL COURSES														
Digitalization of Business Models	I	Exam	60	30	30									6
Programming in MS.NET Technology	II	Exam	90	45		45								8
Object Oriented Programming in Python	III	Grade	60	30		30								6
ICT Based Knowledge Management	IV	Exam	45	30	15									5
Fundamentals of Artificial Intelligence	IV	Exam	30	15		15								4
Business Process Modeling	IV	Grade	60	30		30								6
Business Intelligence	V	Grade	30	15		15								3
Information Systems Security	V	Grade	30	15		15								2
Econometrics	V	Grade	30	15		15								2
Project Practice	VI	Grade	30	15		15								2
Matlab Application	VI	Grade	30	15		15								2
Computer Architecture and Operating Systems	IV	Grade	45	30		15								3
TOTAL SECTION III			540	285	45	210	0	0	0	0	0	0	0	49
SECTION IV. SPECIALIZATION COURSES														
Specialization Course	V	Grade	30	15		15								3
Specialization Course	V	Grade	60	30		30								6
Specialization Course	V	Grade	60	30		30								6
Specialization Course	VI	Grade	60	30		30								6
TOTAL SECTION IV			210	105	0	105	0	0	0	0	0	0	0	21
SECTION V. HUMANISTIC AND SOCIAL COURSES														
Humanistic Course I	VI	Grade	30	15	15									3
Humanistic Course II	VI	Grade	30	15	15									3
Social Course I	VI	Grade	15	15										1
Social Course II	VI	Grade	15	15										1
TOTAL SECTION V			90	60	30	0	0	0	0	0	0	0	0	8

Course	Sem.	Credit form	Full-time studies					Part-time studies					E C T S
			Total hours	L	T	CL	S	Total hours	L	T	CL	S	
SECTION VI. ACADEMIC COURSES - OBLIGATORY													
Electronic Sources of Scientific Information	IV	Credited	4			4							0
Occupational Health and Safety	I	Credited	4	4									0
Physical Training	IV	Credited	30		30								0
Physical Training	V	Credited	30		30								0
Foreign Language I - English - FT1	II	Grade	30		30								2
Foreign Language I - English - FT1	III	Grade	30		30								2
Foreign Language I - English - FT1	IV	Grade	30		30								2
Foreign Language II - FT1	II	Grade	30		30								2
Foreign Language II - FT1	III	Grade	30		30								2
Foreign Language II - FT1	IV	Grade	30		30								2
Foreign Language II - FT1	V	Grade	30		30								2
Bachelor Seminar	V	Credited	30				30						6
Bachelor Seminar	VI	Credited	30				30						12
Bachelor Thesis	VI	Credited											0
TOTAL SECTION VI			338	4	270	4	60	0	0	0	0	0	32
TOTAL HOURS			1898	814	510	514	60	0	0	0	0	0	180

LIST OF SPECIALIZATIONS

System Design and Programming

Database Design	V	Grade	30	15		15							3
Internet Application Development	V	Grade	60	30		30							6
Programming of Mobile Applications	V	Grade	60	30		30							6
User Interaction Design	VI	Grade	60	30		30							6

AI in Business and Management

Artificial Intelligence for Improving Management	V	Grade	30	15		15							3
No-code Approach to Machine Learning	V	Grade	30	15		15							3
Natural Language Processing	V	Grade	30	15		15							3
Intelligent Decision Support Systems	V	Grade	30	15		15							3
Fundamentals of Artificial Neural Networks	V	Grade	30	15		15							3
Business Applications of Generative Artificial Intelligence	VI	Grade	30	15		15							3
Digital Twin Technology	VI	Grade	30	15		15							3