



Study programme

Organizational unit:	Faculty of Management
Field of study:	Management
Level of study:	bachelor's first degree
Form of study:	full-time studies
Education cycle:	2025/2026

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Field of study characteristics

Basic information

Organizational unit:	Faculty of Management
Field of study:	Management
Study level:	bachelor's first degree
Study form:	full-time studies
Education profile:	general academic profile
Language of study:	English
Valid from the education cycle:	2025/2026
Number of semesters:	6
Total number of hours of classes:	directional: 1545 Organizational Management: 765
Total number of ECTS points required to complete a given level of study:	180
Professional title awarded to graduates:	licencjat

Fields of science and scientific disciplines

Scientific disciplines to which the field of study is assigned:

Field of the social sciences

Assigning the major to the fields and disciplines to which the learning outcomes relate:

Discipline	Percentage
Management science and quality	100%

Main discipline: Management science and quality

Description of the field, profile of the graduate and possibilities of continuing studies

Number of semesters: 6

Graduate profile, employability:

"We educate business leaders who are able to face both social and technological challenges"

We achieve this goal through:

1. Shaping business competences
Our graduate is prepared to independently run a business and carry out activities in business entities, especially based on innovative ideas and innovative business models. Acquires basic competences in the area of management organization, finance, accounting, logistics and production, marketing and sales, and personnel. During his studies, he/she develops skills and an entrepreneurial attitude, which manifests itself in initiative in taking actions and a creative approach to solving complex problems. Our graduate is focused on team solving real management problems, using competences in the field of process and project management.
2. Shaping analytical competences
Our graduate understands the material, financial and social processes and phenomena occurring in organizations and their

environment. He/she can think analytically and uses for this purpose the basic mathematical and statistical apparatus as well as the skills of logical thinking and inference.

3. Shaping social competences

Our graduate is prepared to fulfill the role of a leader. He/she is characterized by the ability to lead, communicate effectively, negotiate, self-presentation, work in a team, and manage the work of human teams. He/she is prepared to effectively plan and continue their own education and professional development.

4. Shaping IT and technological competences

Our graduate can select and use modern IT tools, including utility applications, to support processes in various areas of the organization. He/she understands the need and is able to use mobile technologies in the management and development of the organization.

Currentness of the study programme

Concept and goals of education

The concept and objectives of education in the field of Management take into account the compliance of the study program with the scientific activity of the faculty employees in the management and quality sciences discipline. The concept of education includes first- and second-level studies with a general academic profile, which are conducted in a full-time mode in Polish and English language.

The first-level studies have two specialties:

- Business Management (ZP) in Polish;
- Organizational Management (OM) in English.

Second-level studies have four specializations:

- Change Management (ZZM) in Polish;
- Business Process Management (ZPB) in Polish;
- Managerial Behaviors and Decisions (ZDM) in Polish;
- Human Resource Management (HRM) in English.

The aim of education in the field of Management in general is to provide students with the knowledge, skills and social competences necessary to effectively perform typical (first-level) and complex (second-level) substantive and managerial tasks in individual areas of the organization's activity related to the phenomena occurring in its environment and the challenges that arise in it, as well as related to the creative solving of typical (first-level) and complex (second-level) problems in these areas.

Information regarding the inclusion of socio-economic needs in the study programme and the compliance of the major learning outcomes with these needs

The learning outcomes 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.

Other important factors determining the validity of the study programme

The updating and improvement of the curriculum in the Management program is a continuous process. The main sources of changes in the education program are trends in management and organizational sciences, as well as changes in the business and economic environment. Ongoing consultations are held with the Social Council, along with continuous monitoring of labor market changes and tracking of graduates' career paths.

A significant source of changes in the program is the teaching staff, who enhance their teaching skills through training, introducing new teaching methods and didactic tools. Engaging lecturers and specialists with both theoretical knowledge and practical experience in managing enterprises, projects, and teams also plays a crucial role in the teaching process.

An additional factor ensuring the relevance of the program includes consultations with the Student Council, as well as student survey results and conclusions from post-session meetings. These lead to modifications in course content, teaching formats, and the number of instructional hours for individual subjects.

The connection of the programme with the University's mission and its development strategy

Education in Management is conducted in the field of social sciences, however it is directly part of the mission and development strategy of a technical university. Management graduates acquire business, analytical, social and technical competences.

The educational program in Management is coherent with the mission of Wrocław University of Science and Technology in the following areas:

- Developing creative, critical and tolerant graduates, as studying a course in management emphasizes on appropriate skills and attitudes development;
- 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 scientific conferences and 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, by emphasizing the professionalism and hard skills of graduates.

According to the principle adopted at Wrocław University of Science and Technology, studies in the field of Management have a general academic profile. The program satisfies all the conditions stipulated in current legislation and is also in accordance with the Polish Qualifications Framework in the field of social science.

Our programs in Management has have a unique character. In accordance with the University's strategy, which emphasizes the need to respond to the current needs of the labor market, it demonstrates a natural - in business practice - complementarity of technical science and economics, enriched with the element of computer science.

Due to the regional roots of the University, the educational programs in Management create 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 education in the didactic offer at the Faculty is systematically improved. 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 theatres, audio-visual equipment and computer laboratories, and a current software updates.

Learning outcomes

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
Knowledge			
K1_ZARZ_W01	Has a structured understanding of the evolution of management and quality sciences. Explains the nature and position of management and quality sciences within the scientific system, as well as their relationships with other social, economic, and technical disciplines.	P6S_WG, P6S_WK	
K1_ZARZ_W02	Possesses structured knowledge in the field of economics and its relationships with management, quality sciences, and technical disciplines. Understands and describes different types of economic systems and their components. Has a thorough understanding of economic concepts, laws, and interdependencies at both the microeconomic and macroeconomic levels. Characterizes the main economic theories. Possesses advanced knowledge of the objectives and institutions of a market economy, as well as their functions. Has an understanding of the economic conditions that influence the functioning of the economy and organizations.	P6S_WG, P6S_WK	
K1_ZARZ_W03	Understands and is familiar with the key legal regulations governing the establishment and operation of business organizations. Has knowledge of the concepts and principles of industrial property protection and copyright law. Possesses an understanding of the legal conditions affecting the functioning of organizations.	P6S_WK	
K1_ZARZ_W04	Understands and knows how to identify inter-organizational relationships and the interactions of organizations with their environment in the context of national, international, and cross-cultural conditions. Possesses knowledge of the impact of the external environment on the organization.	P6S_WG, P6S_WK	
K1_ZARZ_W05	Understands the types and forms of organizations, and is able to identify their objectives and other key elements. Possesses structured knowledge of the fundamental concepts related to the development and functioning of organizations.	P6S_WG, P6S_WK	
K1_ZARZ_W06	Understands the essence and functions of management and trends (schools) in the theory of organisation and management. Knows selected management concepts, methods and techniques. Distinguishes key criteria for their classification.	P6S_WG, P6S_WK	
K1_ZARZ_W07	Possesses knowledge of traditional and contemporary organizational structures, the factors that shape them, and the processes involved in their formation.	P6S_WG, P6S_WK	
K1_ZARZ_W08	Possesses structured knowledge of the functional areas of a company, the relationships between them, and the key factors influencing the efficiency and effectiveness of activities carried out in these areas.	P6S_WG, P6S_WK	
K1_ZARZ_W09	Understands and identifies key concepts, characterizes methods and tools related to marketing and sales. Explains the essence of marketing management within an organization. Possesses knowledge of consumer behaviors.	P6S_WG, P6S_WK	
K1_ZARZ_W10	Understands and characterizes the elements of the financial system. Possesses knowledge in the areas of accounting, corporate finance, and financial management. Familiar with financial reporting standards and methods for assessing the economic and financial situation of an organization, as well as investment performance evaluation.	P6S_WG, P6S_WK	

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
K1_ZARZ_W11	Possesses in-depth knowledge of human resources within an organization and their strategic significance. Understands the objectives, elements, and conditions of the personnel management process. Identifies and classifies tools for employee selection, motivation, development, evaluation, and compensation, as well as the principles for their effective application.	P6S_WG, P6S_WK	
K1_ZARZ_W12	Understands key concepts and tools related to production and service management. Possesses advanced knowledge of the functioning of production systems and processes. Familiar with methods of production and service management.	P6S_WG, P6S_WK	
K1_ZARZ_W13	Possesses advanced knowledge of logistics systems and processes, and distinguishes their components. Understands the objectives and functions of logistics within an organization and throughout the supply chain.	P6S_WG, P6S_WK	
K1_ZARZ_W14	Explains the essence and significance of quality issues in management, and understands the concepts, objectives, principles, and challenges of quality management. Identifies areas for improving the quality of resources, structures, processes, and procedures, along with their conditions, ultimately enhancing the quality of products and services. Understands the idea of standardization and certification within an organization.	P6S_WG, P6S_WK	
K1_ZARZ_W15	Possesses advanced knowledge of methods and techniques for diagnosing and improving operations in various functional areas of an organization, as well as selected methods for analyzing the business environment. Familiar with specific industry norms and standards within different functional areas.	P6S_WG, P6S_WK	
K1_ZARZ_W16	Possesses knowledge in psychology, organizational sociology, and the humanities. Interprets concepts of human behavior and explains motivation theories. Characterizes the essence and conditions of leadership.	P6S_WG, P6S_WK	
K1_ZARZ_W17	Understands the ethical, humanistic, and social conditions of various types of professional activities. Understands and analyzes the fundamental dilemmas of contemporary civilization.	P6S_WK	
K1_ZARZ_W18	Possesses advanced knowledge of organizational behavior and its determinants. Understands the principles of building and functioning teams, as well as the factors influencing their effectiveness. Describes the concept of organizational culture and its significance in management. Familiar with advanced communication tools and systems in organizations, as well as the characteristics of an efficient communication process.	P6S_WG	
K1_ZARZ_W19	Explains the essence of change management within an organization, identifies sources of resistance to change, and outlines strategies for overcoming that resistance.	P6S_WG, P6S_WK	
K1_ZARZ_W20	Explains the essence, objectives, and principles of project management. Familiar with methods and tools used in project management.	P6S_WG	
K1_ZARZ_W21	Explains the concept of innovation and distinguishes between its various types. Recognizes the characteristics and conditions of organizational innovativeness. Describes the innovation process occurring within an organization. Characterizes the essence and forms of entrepreneurship and identifies the factors that contribute to its emergence and development.	P6S_WG, P6S_WK	

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
K1_ZARZ_W22	Understands the principles of physics and explains the impact of the physical work environment on employee workload.	P6S_WG, P6S_WK	
K1_ZARZ_W23	Familiar with mathematical methods (e.g., vector and matrix calculus, optimization of functions, differential and integral calculus for single and multiple variables) used in economics and management and quality sciences.	P6S_WG	
K1_ZARZ_W24	Possesses knowledge of the construction and application of mathematical and informatics tools in various functional areas of an organization.	P6S_WG, P6S_WK	
K1_ZARZ_W25	Knows advanced statistical methods and information technology tools for collecting, analyzing, and presenting data that describe economic and social processes.	P6S_WG	
K1_ZARZ_W26	Knows the classifications of management information systems and the functionalities of information systems used in various areas of an organization. Describes the methods for selecting and implementing management information systems, as well as the challenges and issues associated with them.	P6S_WG, P6S_WK	
K1_ZARZ_W27	Familiar with advanced methods, techniques, and tools used for solving managerial problems.	P6S_WG	
Skills			
K1_ZARZ_U01	Has the ability to plan business activities, including selecting the appropriate organizational and legal structure, formulating organizational objectives, and developing actions to efficiently achieve these goals.	P6S_UW	
K1_ZARZ_U02	Analyzes and evaluates the objectives, characteristics, elements, processes, and functional areas within an organization, as well as internal and inter-organizational relationships, using concepts and theories from economics and management.	P6S_UW	
K1_ZARZ_U03	Analyzes the causes and dynamics of phenomena within the organization and its environment. Identifies and diagnoses management and substantive issues within the organization and its functional areas.	P6S_UW	
K1_ZARZ_U04	Utilizes selected methods and tools (including mathematical, statistical, and informatics) to identify, analyze, and solve management and substantive issues within the organization and its functional areas.	P6S_UW	
K1_ZARZ_U05	Utilizes normative systems and applies appropriate norms and standards (legal, professional, and ethical) in specific activities within the organization.	P6S_UW	
K1_ZARZ_U06	Formulates alternative solutions to management and substantive issues within the organization and its various functional areas. Selects a solution and verifies it according to established priorities.	P6S_UW	
K1_ZARZ_U07	Applies principles and tools of planning and resource management to effectively execute individual and team tasks.	P6S_UW	
K1_ZARZ_U08	Develops change management plans for the organization by utilizing appropriate methods.	P6S_UW	

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
K1_ZARZ_U09	Identifies, interprets, and evaluates the behaviors of organization members and employs advanced techniques to influence these behaviors.	P6S_UW	
K1_ZARZ_U10	Applies methods and techniques, as well as assessment and forecasting metrics, to evaluate the outcomes of the organization's activities.	P6S_UW	
K1_ZARZ_U11	Selects or creates information tools that support the resolution of management and substantive issues within the organization and its various functional areas.	P6S_UW	
K1_ZARZ_U12	Applies theoretical knowledge from the field of physics to optimize working conditions, taking into account the physical work environment.	P6S_UW	
K1_ZARZ_U13	Possesses skills to analyze research examples and conduct studies in the field of management and quality sciences. Able to formulate conclusions, develop and present findings, and identify directions for further research.	P6S_UW	
K1_ZARZ_U14	Independently utilizes a variety of Polish and foreign sources of information, particularly from professional literature. Analyzes the information obtained and applies it to expand specialized knowledge in the field of management and quality sciences.	P6S_UW, P6S_UK, P6S_UO, P6S_UU	
K1_ZARZ_U15	Can express themselves (both orally and in writing), participate in discussions, present their viewpoints (e.g., in a debate), and assess these viewpoints in terms of social and ethical consequences. Is capable of independently planning and executing their lifelong learning.	P6S_UU	
K1_ZARZ_U16	Employs advanced methods, techniques, and tools to solve managerial problems.	P6S_UW	
Social competence			
K1_ZARZ_K01	Is aware of the necessity to develop their professional knowledge and skills. They are adequately prepared to independently solve problems and to seek expert opinions when faced with difficulties.	P6S_KK, P6S_KR	
K1_ZARZ_K02	Is ready to collaborate in team-based work arrangements (taking on various roles, especially as managers and business leaders). Is prepared to organize and lead small teams.	P6S_KO, P6S_KR	
K1_ZARZ_K03	Is ready to take responsibility for assigned tasks, primarily in the workplace. Is prepared to set priorities in their own work and in collaboration with others while fulfilling various organizational roles.	P6S_KK, P6S_KO, P6S_KR	
K1_ZARZ_K04	Is prepared to identify and analyze social issues in the workplace and to propose solutions for addressing them.	P6S_KO, P6S_KR	
K1_ZARZ_K05	Is prepared to initiate changes in the workplace and to participate in their planning and implementation. Is ready to think and act in an entrepreneurial manner.	P6S_KK, P6S_KO	
K1_ZARZ_K06	Is prepared to communicate and defend their own views, as well as to independently and critically assess their knowledge and the information they receive. Is ready to behave in a professional and ethical manner (including in the workplace).	P6S_KK, P6S_KO, P6S_KR	

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
K1_ZARZ_K07	Is aware of the necessity to engage in activities for the public interest and the social environment.	P6S_KK, P6S_KR	
Language and physical education outcomes			
SJO_S1_U01	Be able to use a foreign language at ESCJ level B2	P6S_UK	
SWF_S1_U01	Is aware of the importance of systematic physical activity for physical and mental health		

Detailed information on ECTS points

Management

Name	Organizational Management
Total ECTS	180
Total number of hours of classes	2310
Number of ECTS points assigned to classes related to scientific activities conducted at the university in the discipline or disciplines to which the field of study is assigned (DN)	159/180 (88.33%)
Number of ECTS points allocated to classes developing practical skills (including laboratory, project) (P)	79.1
The number of ECTS points that a student will receive by completing classes that require the direct participation of academic teachers or other persons conducting classes and students (BU)	99.8
Percentage of ECTS for elective courses	87/180 (48.33%)
The number of ECTS points that a student will receive by completing classes in the humanities or social sciences appropriate for a given field of study	5
The number of contact hours that a student will receive by taking physical education classes	60
The number of ECTS points that a student will receive by completing classes in basic sciences (mathematics, physics/chemistry)	17

Organization of studies

Implementation of the study programme

Allowable ECTS deficit

Semester	Allowable deficit of ECTS points after a semester
Semester 1	13
Semester 2	17
Semester 3	12
Semester 4	11
Semester 5	6
Semester 6	0

Detailed requirements

Not applicable.

Methods of verifying the intended learning outcomes

Activity form	Methods of verifying the intended learning outcomes
Seminar	Multimedia presentations conducted and prepared individually or in groups; case study analysis, class participation, paper
Classes	Credit - oral, written; short test, input task, evaluation of the sub-tasks; practical exam, model, essay, paper
Project	Project preparation, project implementation, project documentation, case study analysis, model
Diploma thesis	Evaluation of work in the preparation of a diploma thesis; diploma examination
Internship	Internship report, internship journal, confirmation of internship program completion
Laboratory	Preparation of laboratory reports; oral statements, class participation; short test, input task, evaluation of the sub-tasks
Lecture	Exam - oral, written, credit, test - oral, written

Description of the process leading to achieving learning outcomes

The process leading to achievement of the assumed learning outcomes includes active participation in the classes organized at the university: lectures, classes, laboratories, projects and seminars, as well as self-studies enabling consolidation, supplementation and extension of knowledge. The educational program create a framework which ensures that student has systematic contact with enterprises and other institutions during studies. If necessary, the student may use individual consultations. Learning outcomes in terms of skills are further developed during obligatory student training program.

Internships

Internship duration: 4 weeks

Internships can be organized as individual or in mode of recognition of the paid work performed by the student as part of the internship,

if the field of study is compatible with the nature of the student's work (required period of employment - minimum three months). The basis for completing the student's internship

1. in an individual mode is:
 - certificate from the company or institution where the internship took place containing: the actual duration of the internship and an opinion on its course (Annex 3 to process No. 7 "Carrying out student training" instruction No. 07-00-00-00-00);
 - a written report documenting the results of the practice (Annex 4 to process No. 7 "Carrying out student training" instruction No. 07-00-00-00-00).
2. under the recognition procedure performed by the student gainful employment as part of the internship is:
 - certificate from the enterprise confirming the fact of employing the student, time of employment and description of the basic tasks performed by the student;
 - certificate of completion of an internship (internship) organized by AIESEC or another students organizations of a similar nature. Recognition of the traineeship organized by students organizations require documentation to be provided to the Vice-Dean for Students; documents in the following languages are required: Polish, English or German.

The internship in the student's electronic record book is credited by the Dean (Vice-Dean for Students) or a person designated by him after getting acquainted with the opinion of the student's intership supervisor and / or documentation regarding the course of the internship.

The aim of student internships at the Faculty of Management is 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:

- acquainting the student with the specificity of the professional environment and the rules of functioning business entities,
- getting acquainted with the technique of keeping documentation for individual work positions and its proper conduct,
- learning the principles of work organization: organizational structures, division of competences, procedures, work planning and control,
- shaping the ability to work in teams of people, especially effective communication, preparation for independent work and decision making,
- shaping specific professional skills directly related with the place of internship,
- verification, development and practical application of acquired during the studies substantive skills,
- improving the skills of organizing own work, team work and effective work -developing activity, entrepreneurship and team cooperation skills,
- gaining experience, knowledge about the labor market and the required skills at work, as well as making a self-assessment of the student's skills to enhance the possibility of successfully competing in the labor market.

Diploma exam

The diploma examination is an oral exam that assesses the knowledge and skills acquired by the student during their studies in a given field of specialization, carried out in accordance with the study program. During the exam, the student is asked three questions selected randomly from three thematic areas:

1. Sources of law and basic legal regulations in economic life.
2. Concepts, principles, and strategies of intellectual property management.
3. Market and types of competition (market structure models) and macro- and microeconomic tools for their regulation.
4. Optimization of Economic Decisions.
5. Monetary and fiscal policy.
6. Financial markets, institutions, and instruments.
7. Elements of the financial system and financial reporting standards.
8. Use of financial instruments to manage risk.
9. Marketing strategies and concepts.
10. Marketing research methods.
11. Types and Kinds of Organizations: Their Goals, Components, and Social Responsibility.
12. Management Functions.
13. Stages and challenges of the innovation process.
14. The role of knowledge and intellectual capital in building innovation.
15. The essence of personnel management in an organisation. Structure of the personnel function.
16. Contemporary leadership concepts in organizations, organizational culture, and ethics of organizational behavior.
17. The essence of exploratory data analysis and statistical inference.
18. Methods of decision support in solving business problems.

19. Optimization of work environment factors load.
20. The essence of project management.
21. Traditional versus agile methodologies in project management.
22. Psychological Determinants of Fit with Professional and Organizational Roles.
23. Generational Diversity in the Labor Market and Organizations: Characteristics, Challenges, and Consequences.
24. Logistic systems and processes implemented in the functional areas of an enterprise.
25. Goals, strategies, and methods of production and service management.
26. Principles of Total Quality Management (TQM).
27. Essence of the processes approach to management in organizations.
28. Management Information Systems (MIS) and their functionalities.

The list of exam questions applicable for a given year is updated as needed, approved by the Program Committee, and published on the Faculty's website. The questions asked during the exam do not go beyond the material covered in the courses completed by the student during their studies

Study plan

Management

Semester 1

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Civil and Commercial Law	Lecture: 30 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 1	Obligatory
Essentials of Management	Lecture: 30 Classes: 30	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 2	Obligatory
Information Technology	Lecture: 30 Laboratory: 15	Graded credit	3	Obligatory
Mathematics	Lecture: 30 Classes: 30	Exam	9	Obligatory
Microeconomics	Lecture: 30 Classes: 30	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 2	Obligatory
Essentials of Finance	Lecture: 30	Graded credit	2	Obligatory
Psychology	Lecture: 30 Seminar: 15	Graded credit	3	Obligatory
Sum	345		30	

Semester 2

One course from the Social competences module to be completed. Two courses from the Human science module I to be completed. Sports classes to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Descriptive Statistics	Lecture: 30 Classes: 15	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 1	Obligatory
Macroeconomics	Lecture: 30 Classes: 30	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 2	Obligatory

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Organizational Science	Lecture: 30 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 1	Obligatory
Sociology	Lecture: 30	Graded credit	2	Obligatory
Work Environment Physics	Lecture: 30 Classes: 15 Laboratory: 15	Lecture: Graded credit Classes: Graded credit Laboratory: Graded credit	Lecture: 2 Classes: 1 Laboratory: 1	Obligatory
Social Competences Module	Seminar: 30	Graded credit	2	Obligatory group
The student completes one course from the Social competences module (2 ECTS).				
Management of Own Potential	Seminar: 30	Graded credit	2	Elective
Communication in Management	Seminar: 30	Graded credit	2	Elective
Human Science Module I	Lecture: 60	Graded credit	4	Obligatory group
The student completes two courses from the Human science module I (4 ECTS).				
The Socio-Economic Dimension of Cultural Heritage in the 20th and 21st Centuries	Lecture: 30	Graded credit	2	Elective
Social Philosophy	Lecture: 30	Graded credit	2	Elective
Philosophy and the Fundamental Challenges of Modern Civilization	Lecture: 30	Graded credit	2	Elective
Sport activities	Classes: 30	Graded credit	-	Obligatory group
The student chooses sports classes from the offer				
Sport activities 1	Classes: 30	Graded credit	-	Elective
Sum	360		24	

Specialty: Organizational Management

One course from the Computer science module and one course from the Legal science module to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Computer Science Module	Lecture: 30 Laboratory: 30	Graded credit	4	Obligatory group
The student completes one course from the Computer science module (4 ECTS).				
Data Processing Technology	Lecture: 30 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 2	Elective
Introduction to SQL	Lecture: 30 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 2	Elective
Legal Science Module	Lecture: 15 Classes: 15	Graded credit	2	Obligatory group
The student completes one course from the Legal science module (2 ECTS).				
Business on the EU Market	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Elective
International Law	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Elective
Sum	90		6	

Semester 3

One course from the Human science module II to be completed. Foreign language course to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Mathematical Economics	Lecture: 30 Classes: 15	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 1	Obligatory
Organizational Behaviours	Lecture: 30 Seminar: 30	Lecture: Graded credit Seminar: Graded credit	Lecture: 2 Seminar: 2	Obligatory
Foreign Language 1.1	Classes: 60	Graded credit	3	Obligatory group
The student chooses classes from the offer of the Department of Foreign Languages				
Foreign Language 1.1	Classes: 60	Graded credit	3	Elective
Human Science Module II	Seminar: 15	Graded credit	1	Obligatory group

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
The student completes one course from the Human science module II (1 ECTS).				
Ethics in Bussines	Seminar: 15	Graded credit	1	Elective
Applied Ethics	Seminar: 15	Graded credit	1	Elective
Sum	180		12	

Specialty: Organizational Management

One course from the Computer science module and one course from the Economic science module to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Financial Accounting in the Organizational Decision Making Process	Lecture: 30 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 1	Obligatory in specialty
Marketing in the Information Society	Lecture: 30 Classes: 30	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 2	Obligatory in specialty
Knowledge Management in the Organization	Seminar: 30	Graded credit	2	Obligatory in specialty
Computer Science Module	Lecture: 30 Laboratory: 30	Graded credit	4	Obligatory group
The student completes one course from the Computer science module (4 ECTS).				
Programming Basics - Python	Lecture: 30 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 2	Elective
Programming Basics - VBA	Lecture: 30 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 2	Elective
Economic Science Module	Lecture: 30 Classes: 30	Graded credit	4	Obligatory group
The student completes one course from the Economic science module (4 ECTS).				
Sustainable Development	Lecture: 30 Classes: 30	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 2	Elective
Market Structures and Their Regulation	Lecture: 30 Classes: 30	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 2	Elective
Sum	255		18	

Semester 4

Internship (in 4th or 5th sem) and foreign language course to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Corporate Finance	Lecture: 30 Classes: 15	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 1	Obligatory
Logistics	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Obligatory
Marketing Management	Lecture: 15 Project: 30	Lecture: Graded credit Project: Graded credit	Lecture: 1 Project: 2	Obligatory
Operations Management	Lecture: 30 Classes: 15 Laboratory: 15	Lecture: Exam Classes: Graded credit Laboratory: Graded credit	Lecture: 2 Classes: 1 Laboratory: 1	Obligatory
Foreign Language 1.2	Classes: 60	Graded credit	3	Obligatory group
The student chooses classes from the offer of the Department of Foreign Languages				
Foreign Language 1.2	Classes: 60	Graded credit	3	Elective
Internship	-	Graded credit	6	Obligatory elective
Sum	240		22	

Specialty: Organizational Management

Two courses from the Computer science module to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Contemporary Organizational Methods and Techniques	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Obligatory in specialty
Computer Science Module	Lecture: 30 Total practical contact hours: 30	Graded credit	4	Obligatory group
The student completes two courses from the Computer science module (4 ECTS).				
Investigation of MIS Requirements	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Elective

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Methods of Management Information Systems Modeling	Lecture: 15 Laboratory: 15	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 1	Elective
Information Systems Analysis	Lecture: 15 Project: 15	Lecture: Graded credit Project: Graded credit	Lecture: 1 Project: 1	Elective
Innovation Management	Lecture: 15 Seminar: 15	Lecture: Graded credit Seminar: Graded credit	Lecture: 1 Seminar: 1	Obligatory in specialty
Sum	120		8	

Semester 5

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Financial Management	Lecture: 30 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 1	Obligatory
Marketing Research	Lecture: 30 Classes: 30	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 2	Obligatory
Total Quality Management	Lecture: 30 Classes: 30	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 2	Obligatory
Diploma Seminar	Seminar: 15	Graded credit	1	Obligatory elective
Sum	180		13	

Specialty: Organizational Management

One course from the Computer science module to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Microstructure of Global Financial Markets	Seminar: 30	Graded credit	2	Obligatory in specialty
Leading Project in Modern Organizations	Lecture: 30 Classes: 15	Lecture: Exam Classes: Graded credit	Lecture: 3 Classes: 1	Obligatory in specialty
Methods and Tools of Data Analysis	Lecture: 15 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 2	Obligatory in specialty

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Modern Human Resource Management	Lecture: 30 Classes: 30	Lecture: Graded credit Classes: Graded credit	Lecture: 2 Classes: 2	Obligatory in specialty
Computer Science Module	Lecture: 30 Laboratory: 30	Graded credit	4	Obligatory group
The student completes one course from the Computer science module (4 ECTS).				
Managing Software Projects	Lecture: 30 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 2	Elective
IT Tools in Project Management	Lecture: 30 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 2	Elective
Sum	240		17	

Semester 6

Sports classes to be completed.

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Self-Presentation	Seminar: 30	Graded credit	2	Obligatory
Business Process Management	Lecture: 15 Laboratory: 15	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 1	Obligatory
Financial Analysis	Lecture: 30 Laboratory: 15	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 1	Obligatory
Information Systems in Management	Lecture: 30 Laboratory: 15	Lecture: Graded credit Laboratory: Graded credit	Lecture: 2 Laboratory: 1	Obligatory
Management Training	Laboratory: 30	Graded credit	2	Obligatory
Bachelor Thesis	Diploma thesis: 30	Graded credit	14	Obligatory elective
Sport activities	Classes: 30	Graded credit	-	Obligatory group
The student chooses sports classes from the offer				
Sport activities 2	Classes: 30	Graded credit	-	Elective
Sum	240		26	

Specialty: Organizational Management

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Introduction to Risk Management	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Obligatory in specialty
Management and Protection of Intellectual Property	Lecture: 15 Classes: 15	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 1	Obligatory in specialty
Sum	60		4	

Syllabuses



Civil and Commercial Law
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.21PK.01742.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 1	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies the provisions of civil and commercial law that constitute the basis for the activities of entrepreneurs.	K1_ZARZ_W03
In terms of skills		
PEU_U01	Appropriately classifies legal norms related to running a business activity.	K1_ZARZ_U05, K1_ZARZ_U14
PEU_U02	Uses the appropriate legal provisions regarding business activities	K1_ZARZ_U05, K1_ZARZ_U14
In terms of social competences		
PEU_K01	Is aware of the importance of legal regulations in business activities	K1_ZARZ_K01

Program content ensuring learning outcomes

The subject is to understand the place and role of civil and commercial law in market circulation. To learn about the key forms of entrepreneurial activity, the principles of creation, functioning, dissolution, and liquidation of commercial law companies and other enterprises. During lectures and exercises, in addition to theoretical content, practical aspects of the issues discussed will also be presented.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Self-study of class topics	30
Student workload	Hours 75



Essentials of Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.21PK.01743.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 1	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Understands and is familiar with the key legal regulations governing the establishment and operation of business organizations. Has knowledge of the concepts and principles of industrial property protection and copyright law. Possesses an understanding of the legal conditions affecting the functioning of organizations	K1_ZARZ_W04
PEU_W02	Understands the types and forms of organizations, and is able to identify their objectives and other key elements. Possesses structured knowledge of the fundamental concepts related to the development and functioning of organizations.	K1_ZARZ_W05
PEU_W03	Understands the essence and functions of management and trends (schools) in the theory of organisation and management. Knows selected management concepts, methods and techniques. Distinguishes key criteria for their classification.	K1_ZARZ_W06

PEU_W04	Possesses knowledge of traditional and contemporary organizational structures, the factors that shape them, and the processes involved in their formation.	K1_ZARZ_W07
PEU_W05	Possesses structured knowledge of the functional areas of a company, the relationships between them, and the key factors influencing the efficiency and effectiveness of activities carried out in these areas.	K1_ZARZ_W08
In terms of skills		
PEU_U01	Analyzes and evaluates the objectives, characteristics, elements, processes, and functional areas within an organization, as well as internal and inter-organizational relationships, using concepts and theories from economics and management.	K1_ZARZ_U02
PEU_U02	Analyzes the causes and dynamics of phenomena within the organization and its environment. Identifies and diagnoses management and substantive issues within the organization and its functional areas.	K1_ZARZ_U03
PEU_U03	Formułuje alternatywne rozwiązania problemów zarządczych i merytorycznych w organizacji i w jej poszczególnych obszarach funkcjonalnych. Dokonuje wyboru rozwiązania i weryfikuje je zgodnie z ustalonymi priorytetami.	K1_ZARZ_U06
PEU_U04	Applies principles and tools of planning and resource management to effectively execute individual and team tasks.	K1_ZARZ_U07
PEU_U05	Independently utilizes a variety of Polish and foreign sources of information, particularly from professional literature. Analyzes the information obtained and applies it to expand specialized knowledge in the field of management and quality sciences.	K1_ZARZ_U14
In terms of social competences		
PEU_K01	Is aware of the necessity to develop their professional knowledge and skills. They are adequately prepared to independently solve problems and to seek expert opinions when faced with difficulties.	K1_ZARZ_K01

Program content ensuring learning outcomes

The aim of the course is to ensure fundamental knowledge about characteristics, elements and types of organizations and impact the environment on organizational operations. Students learn about management processes, functions, principles and tools. The course will ensure fundamental skills to analyse and evaluate selected characteristics of the organization and selected internal and interorganizational relationships.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Self-study of class topics	46
Preparaton for classes	15
Credit/Exam	4

Student workload	Hours 125
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Information Technology
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.21TI.01744.25
Organizational unit Faculty of Management	Group of classes Yes
Study level bachelor's first degree	Lecture languages English
Study form full-time studies	Mandatoriness Obligatory
Education profile general academic profile	Block Information Technologies
	Subject related to scientific research Yes

Semester Semester 1	Examination Graded credit	Number of ECTS points 3.0
	Activities and hours Lecture: 30 Laboratory: 15	

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies suitable technologies, methods, techniques and computer tools for word processing to describe economic processes and support organizational operations.	K1_ZARZ_W25
PEU_W02	Identifies suitable technologies, methods, techniques and IT tools for acquiring, collecting, analyzing and presenting data describing economic processes and for solving management challenges.	K1_ZARZ_W25
PEU_W03	Understands the importance of data security and protection applicable to collecting and analyzing data and knows the types of cyber attacks and how to address the threats.	K1_ZARZ_W25

In terms of skills		
PEU_U01	Selects and deploys suitable technologies, methods, techniques and IT tools for word processing to support organizational operations and solve managerial challenges.	K1_ZARZ_U11
PEU_U02	Selects and deploys suitable technologies, methods, techniques and IT tools for acquiring, collecting, analyzing and presenting data to support organizational operations and solve managerial challenges.	K1_ZARZ_U11

Program content ensuring learning outcomes

During the lectures, students are familiarized with selected information technologies in terms of software functions for word processing, data acquisition, collection, analysis and presentation, in the context of organizational and business management. Students are introduced to methods and techniques applicable to solving management problems. Complementing the lecture is a topic on cyber security. Laboratory classes require students to master and demonstrate their ability to use selected IT tools, methods and techniques to an advanced degree. The tasks carried out are designed for applications in organizations.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	15
Preparation for classes	28
Preparation for an exam/credit	2
Student workload	Hours 75



Mathematics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.21PM.01745.25
Organizational unit Faculty of Management	Group of classes Yes
Study level bachelor's first degree	Lecture languages English
Study form full-time studies	Mandatoriness Obligatory
Education profile general academic profile	Block Subjects of basic education - mathematics

Semester Semester 1	Examination Exam	Number of ECTS points 9.0
	Activities and hours Lecture: 30 Classes: 30	

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	possesses basic knowledge essential for solving equations and inequalities involving absolute value, polynomials, and rational, exponential and logarithmic functions	K1_ZARZ_W23
PEU_W02	possesses elementary knowledge essential for solving systems of linear equations	K1_ZARZ_W23
PEU_W03	knows basic properties of elementary functions and basics of differential calculus and integral calculus of function of one variable	K1_ZARZ_W23
PEU_W04	possesses basic knowledge of calculus of functions of two variables	K1_ZARZ_W23
In terms of skills		

PEU_U01	is capable of solving equations and inequalities involving absolute value, polynomials, and rational, exponential and logarithmic functions	K1_ZARZ_U04
PEU_U02	is capable of solving systems of linear equations	K1_ZARZ_U04
PEU_U03	can calculate limits of sequences and functions, can determine asymptotes of functions, can calculate derivatives of functions and interpret calculation results, can calculate and interpret indefinite and definite integrals	K1_ZARZ_U04
PEU_U04	is capable of finding extrema of functions of two variables	K1_ZARZ_U04
In terms of social competences		
PEU_K01	can, without assistance, search for necessary information in the literature	K1_ZARZ_K01
PEU_K02	understands the need for systematic and independent work on mastery of course material	K1_ZARZ_K01

Program content ensuring learning outcomes

Acquiring basic knowledge related to solving equations and inequalities involving elementary functions such as polynomials and rational functions, exponential and logarithmic functions.

Study of the basic concepts of algebra with the purpose of solving systems of linear equations.

Learning the basic concepts, theorems, methods and applications of calculus of functions of one and two variables .

Constructing mathematical models with the aim of applications in economy and technology.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Preparation for classes	70
Self-study of class topics	70
Preparation for an exam/credit	21
Credit/Exam	4
Student workload	Hours 225



Microeconomics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.21PK.01746.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 1	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Possesses structured knowledge in the field of economics and its relationships with management, quality sciences, and technical disciplines. Understands and describes different types of economic systems and their components. Has a thorough understanding of economic concepts, laws, and interdependencies at both the microeconomic and macroeconomic levels. Characterizes the main economic theories. Possesses advanced knowledge of the objectives and institutions of a market economy, as well as their functions. Has an understanding of the economic conditions that influence the functioning of the economy and organizations	K1_ZARZ_W02
PEU_W02	Understands and knows how to identify inter-organizational relationships and the interactions of organizations with their environment in the context of national, international, and cross-cultural conditions. Possesses knowledge of the impact of the external environment on the organization.	K1_ZARZ_W04

In terms of skills		
PEU_U01	Analyzes and evaluates the objectives, characteristics, elements, processes, and functional areas within an organization, as well as internal and inter-organizational relationships, using concepts and theories from economics and management.	K1_ZARZ_U02
PEU_U02	Analyzes the causes and dynamics of phenomena within the organization and its environment. Identifies and diagnoses management and substantive issues within the organization and its functional areas.	K1_ZARZ_U03
PEU_U03	Independently utilizes a variety of Polish and foreign sources of information, particularly from professional literature. Analyzes the information obtained and applies it to expand specialized knowledge in the field of management and quality sciences.	K1_ZARZ_U14
In terms of social competences		
PEU_K01	Is aware of the necessity to develop their professional knowledge and skills. They are adequately prepared to independently solve problems and to seek expert opinions when faced with difficulties.	K1_ZARZ_K01

Program content ensuring learning outcomes

The student will learn the basic concepts of microeconomics concerning the consumer and the firm. In particular, the student will learn the law of supply and demand, the basics of welfare economics, the elements of pricing policy, and the theory of enterprise costs and the basics of market structures. The student will learn how to search for information in microeconomics and how to analyze the economic situation and its impact on the operation of the enterprise on the basis of this information. Working in a group and individually, the student will acquire social competence.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Preparation for classes	16
Preparation for an exam/credit	15
Self-study of class topics	15
Preparation of a report/summary/presentation/paper	15
Credit/Exam	4
Student workload	Hours 125



Essentials of Finance
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.21PK.01750.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 1	Activities, hours, ECTS and examination • Lecture: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Know financial categories concerning financial markets, institutions, and instruments.	K1_ZARZ_W10
PEU_W02	Have knowledge of role and functioning of money in economy, of the banking system and of central banks.	K1_ZARZ_W10
PEU_W03	Know how to apply the knowledge on money creation process and on time value of money, to simple analytical tasks.	K1_ZARZ_W10
In terms of social competences		
PEU_K01	Can correctly use the notions and financial terminology from the scope of fundamentals of finance.	K1_ZARZ_K01
PEU_K02	Are able to perform quantitative analyses of selected simple financial tasks in the area of money creation process and time value of money.	K1_ZARZ_K01

Program content ensuring learning outcomes

Lecture gets students familiar with financial notions and categories related to financial markets, institutions, instruments, and money. Students will possess the knowledge and skills of correct usage of financial notions and relationships for selected problems concerning financial system operations, money creation process, and time value of money.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Preparation for an exam/credit	10
Preparation of a report/summary/presentation/paper	10
Student workload	Hours 50



Psychology
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.21PO.01747.25
Organizational unit Faculty of Management	Group of classes Yes
Study level bachelor's first degree	Lecture languages English
Study form full-time studies	Mandatoriness Obligatory
Education profile general academic profile	Block Subjects of general education
	Subject related to scientific research Yes

Semester Semester 1	Examination Graded credit	Number of ECTS points 3.0
	Activities and hours Lecture: 30 Seminar: 15	

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has basic knowledge of psychology. Interprets basic human concepts and explains the mechanisms that guide human thinking and motivated behavior. Characterizes the essence and conditions of human functioning in various social contexts including organizations.	K1_ZARZ_W16
In terms of skills		
PEU_U01	Able to identify, interpret and evaluate human behavior in various social arrangements including members of an organization and apply typical techniques to influence this behavior.	K1_ZARZ_U09

In terms of social competences		
PEU_K01	Is prepared to identify and analyze social problems in the workplace. He can flexibly seek ways to solve them.	K1_ZARZ_K04, K1_ZARZ_K06
PEU_K02	He is prepared to communicate, persuade and defend his own views for the sake of achieving common goals. Is prepared to behave in a professional and ethical manner.	K1_ZARZ_K04, K1_ZARZ_K06

Program content ensuring learning outcomes

During the lectures, students will become familiar with the fundamentals of psychology as a science of human behavior, and they will learn how learning mechanisms and behavior influence daily activities. They will delve into the role of personality and temperament in regulating behavior, as well as understand the impact of emotions and motivation on decision-making and effectiveness. Students will explore how the senses and perception processes organize our knowledge of the world, and how memory, intelligence, and thinking shape our ability to solve problems. Furthermore, they will gain an understanding of how stress and psychopathology affect health and learn about the stages of human development throughout life. Students will also explore topics in positive psychology, well-being, and social relationships, discovering how these elements influence individual functioning in everyday life and the workplace.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Seminar	15
Preparaton for classes	10
Preparation of a report/summary/presentation/paper	10
Preparation for an exam/credit	10
Student workload	Hours 75



Data Processing Technology
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.22PS.01778.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 2</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> Lecture: 30 h, 2 ECTS, Graded credit Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Knows the relational data base structure and basic problems of their creating and using.	K1_ZARZ_W24, K1_ZARZ_W25
PEU_W02	Knows operations of the relational algebra as a basis of the relational database system functioning in data gathering, memorizing and distributing.	K1_ZARZ_W24, K1_ZARZ_W25, K1_ZARZ_W27
PEU_W03	Knows a data base graphical user interface.	K1_ZARZ_W27
In terms of skills		
PEU_U01	Capable to implement a simple relational data base system.	K1_ZARZ_U11
PEU_U02	Capable to get information ad hoc from the relational database system by defining in the data base graphical user interface data retrieval processes.	K1_ZARZ_U11, K1_ZARZ_U14

In terms of social competences		
PEU_K01	Is ready develop her/his knowledge and skills, to collaborate and to work in groups, ready to identify, analyze and solve problems in the area of the application of the database systems in management problems solving.	K1_ZARZ_K01
PEU_K02	Is ready to professionally find and chose problem solving methods, to take the responsibility for them, pass over, convince and defend own views connecting with the application of the database systems in management problems solving.	K1_ZARZ_K01

Program content ensuring learning outcomes

To get knowledge about relational data bases and ways of creating and using them in practice.

To acquire capability to create and use of relational database systems for getting information ad hoc for company management purposes.

To acquire social competences specific for the applications of database systems in management information systems.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	30
Preparaton for classes	30
Preparation for an exam/credit	10
Student workload	Hours 100



Introduction to SQL
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.22PS.01779.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Knows the structure of a relational database and the problems and methods of its design and implementation.	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W02	Knows the operations of relational algebra as the basis for using a relational database system in collecting, storing, and sharing data and the database system query language.	K1_ZARZ_W24, K1_ZARZ_W25, K1_ZARZ_W27
In terms of skills		
PEU_U01	Can design and implement a simple relational database system.	K1_ZARZ_U11
PEU_U02	Can retrieve ad hoc information from a relational database by defining data retrieval processes in query language.	K1_ZARZ_U11, K1_ZARZ_U14
In terms of social competences		

PEU_K01	Is ready to develop her/his knowledge and skills, to collaborate and to work in groups, ready to identify, analyze and solve problems in the area of the application of the database systems in management problems solving.	K1_ZARZ_K01
PEU_K02	Is ready to professionally find and chose problem solving methods, to take the responsibility for them, pass over, convince and defend own views connecting with the application of the database systems in management problems solving.	K1_ZARZ_K01

Program content ensuring learning outcomes

The purpose of the course is to acquire theoretical knowledge and practical skills for creating and using relational databases. Students learn how to create databases by properly defining tables. In addition, in the real-life example, they learn to formulate queries that allow them to search for specific information. During the lecture, students are introduced to the syntax of the SQL language and detailed information on how a relational database works. In laboratory classes, students are expected to use the knowledge acquired during the lecture to perform practical tasks.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	30
Preparaton for classes	30
Preparation for an exam/credit	10
Student workload	Hours 100



Business on the EU Market
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.22PS.01793.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 2</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 15 h, 1 ECTS, Graded credit • Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies legal regulations regulating the functioning of the market	K1_ZARZ_W02, K1_ZARZ_W03, K1_ZARZ_W21
In terms of skills		
PEU_U01	Analyzes the legal regulations that constitute the basis of market turnover.	K1_ZARZ_U01, K1_ZARZ_U05, K1_ZARZ_U14
PEU_U02	Knows the history of the EU since its creation, focuses on economic integration, explains the institutional environment and compares it with other relevant international organizations in Europe	K1_ZARZ_U01, K1_ZARZ_U05, K1_ZARZ_U14
PEU_U03	Understands the relationship between fundamental rights (human rights) and business in Europe	K1_ZARZ_U01, K1_ZARZ_U05, K1_ZARZ_U14

In terms of social competences		
PEU_K01	Identifies competition risks and their impact on doing business in the EU	K1_ZARZ_K01, K1_ZARZ_K04, K1_ZARZ_K06

Program content ensuring learning outcomes

The course is to provide an in-depth knowledge of the principles, legal basis, mechanisms, and economic effects of the EU internal market. In particular, the mechanism of the four economic freedoms of the European single market and its effects on Member States and external partners will be discussed, as well as the main barriers that exist in the EU internal market in relation, to the four freedoms.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Preparation of a project	20
Student workload	Hours 50



International Law
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.22PS.01794.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies the basic norms of public international law	K1_ZARZ_W02, K1_ZARZ_W03, K1_ZARZ_W21
In terms of skills		
PEU_U01	Correctly interprets the norms of public international law.	K1_ZARZ_U01, K1_ZARZ_U05, K1_ZARZ_U14
In terms of social competences		
PEU_K01	Declares the need to supplement knowledge in the field of public international law and understands the variability of the norms of this speciality of law	K1_ZARZ_K01, K1_ZARZ_K04, K1_ZARZ_K06

Program content ensuring learning outcomes

The subject is to provide knowledge on the legal provisions regulating relations between independent, sovereign states and knowledge on the creation and functioning of the main institutions and structures of contemporary international law

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Conducting literature research	20
Student workload	Hours 50



Descriptive Statistics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22PM.01749.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Subjects of basic education - mathematics
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Characterization and explanation of the concepts of probability theory.	K1_ZARZ_W24
PEU_W02	Characterization and explanation of concepts in the field of descriptive statistics and statistical inference.	K1_ZARZ_W25
In terms of skills		
PEU_U01	Analysis of statistical data and uses models from the field of statistical inference.	K1_ZARZ_U04
PEU_U02	Construction of probabilistic models that support decision-making in the field of management.	K1_ZARZ_U16

Program content ensuring learning outcomes

The aim of the course is to introduce students to fundamental concepts and techniques of descriptive statistics, enabling them to analyze and interpret data effectively. Students learn about frequency distributions, measures of central tendency, and dispersion to summarize datasets. During the lectures, they are introduced to methods for measuring data shape, including skewness, kurtosis, and the least squares method. They will get familiar with probability concepts, including classical and frequency definitions, as well as fundamental probability theorems. The course also covers probability distributions such as binomial, Poisson, and normal distributions, along with their applications. Students will develop an understanding of sampling theory, the central limit theorem, and estimation techniques, including maximum likelihood estimation. By the end of the course, they will be able to apply statistical methods to real-world problems, make data-driven decisions, and develop a critical approach to interpreting statistical information.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparaton for classes	21
Prepararation for an exam/credit	30
Credit/Exam	4
Student workload	Hours 100



Macroeconomics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22PK.01751.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has extended knowledge of macroeconomics. Knows and characterizes the elements of economic systems and is able to identify the relationships between them. Is able to explain the relationships between markets and their impact on the macroeconomic situation of the country.	K1_ZARZ_W02
PEU_W02	Has an indepth knowledge about the economic situation of the country and the world. The student recognizes and explains the impact of macroeconomic factors on the organization's activities.	K1_ZARZ_W04
In terms of skills		
PEU_U01	Analyzes and assesses the impact of changes in the macroeconomic environment on the organization's activities.	K1_ZARZ_U02
PEU_U02	Analyzes the causes and directions of changes in the macroeconomic environment of the organization.	K1_ZARZ_U03

PEU_U03	Independently uses various sources of information on the macroeconomic situation of Poland, the European Union and other selected countries. Analyzes the impact of current events on the macroeconomic environment of the organization.	K1_ZARZ_U14
In terms of social competences		
PEU_K01	Is prepared to independently and critically assess changes in the macroeconomic environment of the organization.	K1_ZARZ_K06

Program content ensuring learning outcomes

The aim of the course is to familiarize participants with issues in the area of macroeconomics. The student will learn about macroeconomic indicators and understand what the analysis of the goods and services market, the money market and the labor market is. Students will understand the concept of the business cycle and fluctuations in the economy, learn about the operation and importance of fiscal and monetary policy.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Self-study of class topics	45
Preparation of a report/summary/presentation/paper	6
Preparation for an exam/credit	10
Credit/Exam	4
Student workload	Hours 125



Organizational Science
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22PK.01752.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	identifies types of organizations and organizational design dimensions	K1_ZARZ_W01, K1_ZARZ_W05
PEU_W02	explains and illustrates the impact of the environment on the operations of the organization	K1_ZARZ_W01, K1_ZARZ_W04
PEU_W03	explains forming and functioning of the organization, identifies organizational development stages	K1_ZARZ_W07
In terms of skills		
PEU_U01	analyzes and evaluates the organizational design choices	K1_ZARZ_U01, K1_ZARZ_U02, K1_ZARZ_U14
PEU_U02	analyzes and evaluates the organization as a system of functions and processes	K1_ZARZ_U03

PEU_U03	analyzes and evaluates organizations in different life cycle stages	K1_ZARZ_U03
In terms of social competences		
PEU_K01	appreciates the need for a multifaceted analysis of organizational phenomena	K1_ZARZ_K01, K1_ZARZ_K04
PEU_K02	is prepared to critically analyze various choices in organizational design	K1_ZARZ_K06
PEU_K03	accepts that managers have to comply with appropriate - professional and ethical standards	K1_ZARZ_K06

Program content ensuring learning outcomes

The purpose of the course is to familiarize students with the basic concepts of organization theory. Students learn to analyze the environment and the components of an organization. In the course of the lecture, students are introduced to the challenges of forming strategy, structure and organizational culture. Students are introduced to the principles concerning the division of labor and the creation of hierarchical relationships, methods for analyzing the internal and external organization, the use of technology and the implementation of organizational change. The methods learned are used in classes.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparation of a report/summary/presentation/paper	15
Preparation for an exam/credit	5
Preparation for classes	5
Self-study of class topics	5
Student workload	Hours 75



Sociology
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22PO.01753.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Subjects of general education
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination • Lecture: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Understands and describes the mechanisms of the social construction of reality, presents and outlines the requirements and conflicts of social and professional roles, understands the role of trust, and identifies the consequences of belonging to social networks in the context of national, international, and intercultural conditions. Additionally, recognizes the connections between social sciences and management and quality sciences.	K1_ZARZ_W01, K1_ZARZ_W04
PEU_W02	Identifies and classifies social bonds, indicates levels of social integration, understands the essence of the concepts of social capital and leadership. Additionally, comprehends the importance of the strategic nature of human resources in an organization.	K1_ZARZ_W16
PEU_W03	Understands the role of culture in the functioning of society and social groups. Is familiar with and understands the fundamental ethical considerations of various types of professional activities.	K1_ZARZ_W17

PEU_W04	Identifies major social issues, indicates their determinants, consequences, and sources of resistance to change.	K1_ZARZ_W19
In terms of social competences		
PEU_K01	Is aware of the necessity of independently developing knowledge and professional skills in the field of organization and management sciences. Is capable of independently expanding this knowledge and improving these skills.	K1_ZARZ_K01

Program content ensuring learning outcomes

The objective of the course is to provide general knowledge about the mechanisms of social life, enabling a better understanding of processes and relationships within society. An important aspect is also to deliver knowledge about social and professional roles and their social conditions, allowing for a deeper comprehension of interpersonal dynamics and the functioning of individuals in various contexts. Additionally, the course aims to familiarize students with the basic methods and techniques of sociological research, enabling the analysis and interpretation of social phenomena in a scientific and practical manner.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Self-study of class topics	10
Preparation for an exam/credit	10
Student workload	Hours 50



Work Environment Physics
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000S.22PF.01754.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory</p> <p>Block Subjects of basic education - physics</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 2</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 2 ECTS, Graded credit • Classes: 15 h, 1 ECTS, Graded credit • Laboratory: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Recognizes selected factors of the work environment and explains their impact on employees.	K1_ZARZ_W15, K1_ZARZ_W22
In terms of skills		
PEU_U01	Determines the load of selected physical environmental factors at the workplace and selects the optimal range of a given environmental factor depending on the work performed.	K1_ZARZ_U05, K1_ZARZ_U12
In terms of social competences		
PEU_K01	Is capable of working together in a team to optimally solve the problems assigned to him.	K1_ZARZ_K02, K1_ZARZ_K05

Program content ensuring learning outcomes

Lecture, classes, laboratories: To provide basic knowledge, taking into account its application aspects, regarding: the type of working environment factors, measurement of work environment factors, the impact of work environment factors on humans, especially in the context of the work performed.

Classes, laboratories: Development of skills related to the performance of assessment of the load of physical factors of the working environment and application of selected methods of reducing the load of physical factors of the working environment.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Laboratory	15
Conducting empirical studies	8
Self-study of class topics	6
Preparation of a report/summary/presentation/paper	16
Preparation for an exam/credit	10
Student workload	Hours 100



Management of Own Potential
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22PO.01756.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Subjects of general education
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination • Seminar: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has systematic knowledge of the factors influencing personal and professional development, personal branding, and image.	K1_ZARZ_W16, K1_ZARZ_W27
PEU_W02	Identifies types of career paths and methods and techniques supporting their development, as well as theories, methods, and tools for motivating oneself and others to take action, along with principles for implementing changes within an organization.	K1_ZARZ_W18, K1_ZARZ_W19, K1_ZARZ_W27
In terms of skills		
PEU_U01	Is able to conduct a self-diagnosis of strengths and weaknesses and assess their personal development, including the use of scientific studies and related analytical tools.	K1_ZARZ_U13, K1_ZARZ_U14
PEU_U02	Is capable of formulating a strategy for achieving personal goals and developing a personal development plan, taking into account lifelong learning.	K1_ZARZ_U15

PEU_U03	Is able to use various creativity techniques to generate ideas for solving managerial and substantive problems in specific functional areas of an organization.	K1_ZARZ_U09, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is aware of the importance of relationships with the group and the environment in the process of personal development and consciously and purposefully shapes them while behaving in a professional and ethical manner.	K1_ZARZ_K02, K1_ZARZ_K06
PEU_K02	Demonstrates readiness to identify and analyze social problems, set priorities, initiate changes, and communicate and defend personal views in both individual and team work.	K1_ZARZ_K03, K1_ZARZ_K04, K1_ZARZ_K05

Program content ensuring learning outcomes

The objective of the course is to familiarize students with the concepts related to personal development and career planning, enabling them to consciously shape their professional paths. An essential component is the development of knowledge about building one's potential and acquiring the skills necessary for effective functioning in various work environments. Students will also gain insight into the importance of personal branding as a key factor in achieving professional success. Additionally, the course highlights practical opportunities to apply management knowledge in the process of achieving career goals, providing students with better preparation for making informed decisions in their careers.

Calculation of ECTS points

Activity form	Activity hours
Seminar	30
Preparation of a report/summary/presentation/paper	5
Self-study of class topics	10
Preparation for classes	5
Student workload	Hours 50



Communication in Management
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000S.22PO.01757.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Subjects of general education</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 2</p>	<p>Activities, hours, ECTS and examination • Seminar: 30 h, 2 ECTS, Graded credit</p>
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies basic methods, techniques, and tools for solving problems related to managerial communication.	K1_ZARZ_W16, K1_ZARZ_W18, K1_ZARZ_W19, K1_ZARZ_W27
In terms of skills		
PEU_U01	Independently use a variety of Polish and foreign sources of information, in particular the professional literature. She can integrate the obtained information and use it to deepen specialist knowledge related to the field of social sciences, the discipline of management sciences, in particular to managerial communication.	K1_ZARZ_U09, K1_ZARZ_U13, K1_ZARZ_U14, K1_ZARZ_U15, K1_ZARZ_U16

PEU_U02	Understands general and scientific listening and reading texts related to the field of social sciences, discipline of management sciences. Can express herself (orally and in writing), participate in discussions and present opinions in multicultural environment - in a foreign language.	K1_ZARZ_U09, K1_ZARZ_U13, K1_ZARZ_U14, K1_ZARZ_U15, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is able to cooperate and work in group and team forms of work organization (taking various roles in them).	K1_ZARZ_K02, K1_ZARZ_K03
PEU_K02	Is prepared to take responsibility for assigned tasks.	K1_ZARZ_K03, K1_ZARZ_K04, K1_ZARZ_K05
PEU_K03	Is prepared to communicate, persuade, and defend one's views in the name of achieving common goals. Student is prepared to behave in a professional and ethical manner.	K1_ZARZ_K06

Program content ensuring learning outcomes

During seminars, students will learn practical principles of managerial communication, which are critical in the 21st century. They will develop the ability to apply supportive communication that builds team engagement and improves organizational performance. They will learn how to effectively use persuasive communication to positively influence colleagues, and how to tailor communication styles to different management levels. Participants will practice conducting job interviews with active listening and providing feedback, enhancing their team management skills. They will also learn the principles of ethical leadership communication, enabling them to avoid manipulation and build trust within the organization. Finally, students will gain an understanding of how to overcome communication barriers such as biases and generational differences, and how to conduct effective business meetings, from planning the agenda to maintaining participants' attention.

Calculation of ECTS points

Activity form	Activity hours
Seminar	30
Preparation of a report/summary/presentation/paper	5
Preparation for classes	10
Preparation of a project	5
Student workload	Hours 50



The Socio-Economic Dimension of Cultural Heritage in the 20th and 21st
Centuries

Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/0005.22HS.04124.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Subjects from the fields of humanities or social sciences</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 2</p>	<p>Activities, hours, ECTS and examination • Lecture: 30 h, 2 ECTS, Graded credit</p>
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies basic issues in the development of cultural heritage.	K1_ZARZ_W16, K1_ZARZ_W17
PEU_W02	Recognizes forms of cultural heritage in relation to legal, economic and ethical considerations.	K1_ZARZ_W17
PEU_W03	Identifies the basic problems of cultural heritage, taking into account changes in economic systems.	K1_ZARZ_W17
In terms of skills		
PEU_U01	Is able to express themselves (orally and in writing), participate in discussions and present their positions (e.g., in a debate) and evaluate them in terms of social and ethical implications on topics related to cultural heritage.	K1_ZARZ_U15

In terms of social competences		
PEU_K01	Is prepared to communicate and defend his own views, and to independently and critically evaluate the knowledge he has and the content he receives.	K1_ZARZ_K06

Program content ensuring learning outcomes

The classes have the form of a lecture. The aim of the course is to familiarize students with selected issues in the field of preservation and management of cultural heritage in Poland and Europe, and to discuss its social and economic significance and value in the formation of society, its identity and needs. The course will discuss issues related to war losses in terms of international politics, the impact of political changes on the preservation and management of cultural heritage, the institutional environment of heritage and its global dimension on the level of the market economy.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Preparation of a report/summary/presentation/paper	20
Student workload	Hours 50



Social Philosophy
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22HS.01748.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Subjects from the fields of humanities or social sciences
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination • Lecture: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Student knows and understands the ethical, humanistic and social determinants of different professional activities.	K1_ZARZ_W16
PEU_W02	Student knows and understands the fundamental dilemmas of modern civilisation.	K1_ZARZ_W16, K1_ZARZ_W17
In terms of skills		
PEU_U01	Student is able to participate in a debate - to present, critically evaluate and discuss different opinions and positions.	K1_ZARZ_U15
In terms of social competences		
PEU_K01	Student is able to critically evaluate received content and assess the sources of information.	K1_ZARZ_K06
PEU_K02	Student is prepared to present their own opinions and positions.	K1_ZARZ_K06

PEU_K03	The student is prepared to behave in an ethical manner both in their private and professional life.	K1_ZARZ_K06
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Program content ensuring learning outcomes

The course introduces students to fundamental issues in ethics and social philosophy. The emphasis is put on those issues and concepts whose knowledge allows a better understanding of the fundamental challenges of contemporary society. The way in which the course is conducted and the selection of topics are intended to support the development of students' critical thinking skills and to raise their awareness of the social responsibility of science and technology.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Preparation for an exam/credit	5
Preparation for classes	5
Self-study of class topics	10
Student workload	Hours 50



Philosophy and the Fundamental Challenges of Modern Civilization
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.22HS.04125.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Subjects from the fields of humanities or social sciences
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 2	Activities, hours, ECTS and examination • Lecture: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Understands the ethical, humanistic, and social factors that influence various professional activities.	K1_ZARZ_W16, K1_ZARZ_W17
PEU_W02	Knows and understands the fundamental challenges and dilemmas of modern civilisation.	K1_ZARZ_W16, K1_ZARZ_W17
In terms of skills		
PEU_U01	Is able to participate in a debate - to present, critically evaluate and discuss different opinions and positions.	K1_ZARZ_U15
In terms of social competences		
PEU_K01	Is able to critically evaluate received content and assess the sources of information.	K1_ZARZ_K06
PEU_K02	Is prepared to present their own opinions and positions.	K1_ZARZ_K06

PEU_K03	Is prepared to fulfill professional roles responsibly, including: (a) adhering to professional ethics and demanding this of others, (b) caring for the achievements and traditions of the profession.	K1_ZARZ_K06
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Program content ensuring learning outcomes

The course is delivered in a lecture format and aims to: (a) introduce students to fundamental concepts in philosophy, with a focus on ethics and social philosophy; (b) explore the philosophical foundations of key contemporary social challenges; (c) foster the development of students' critical thinking and analytical skills; (d) raise students' awareness of the social responsibility associated with science and technology.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Preparaton for classes	5
Self-study of class topics	10
Preparation of a report/summary/presentation/paper	5
Student workload	Hours 50



Sport activities 1
Educational subject description sheet

Basic information

Field of study wychowanie fizyczne	Education cycle 2025/2026
Speciality -	Subject code PWRSWFS.8EWF.04468.25
Organizational unit Wrocław University of Science and Technology	Lecture languages English
Study level first degree	Mandatoriness Elective
Study form full-time studies	Block Physical education classes
Education profile general academic profile	

Semesters Semester 2, Semester 3, Semester 4	Activities, hours, ECTS and examination • Classes: 30 h, 0 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	The participant knows how to organize health-promoting training according to his or her interests, using the principles of a selected sports discipline or form of recreation.	SWF_S1_U01
PEU_U02	The student knows training methods that develop motor skills using their own body weight and various equipment.	SWF_S1_U01
PEU_U03	The student knows the basic technique of shaping exercises needed to prepare the body for physical exercise.	SWF_S1_U01
PEU_U04	The student knows the basic rules of safe behavior during physical activity.	SWF_S1_U01
PEU_U05	The student is able to develop a short- and long-term training plan adequate to his or her abilities.	SWF_S1_U01

PEU_U06	The student knows the principles of strengthening the deep and peripheral stabilization apparatus and the technique of basic exercises shaping aerobic and strength capacity.	SWF_S1_U01
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Program content ensuring learning outcomes

Sports activities – ABT, aikido, badminton, bodyART, body ball, Brazilian Jiu Jitsu, Callanetics, cuban salsa fit, futsal, yoga, jogging, judo, karate, basketball, bodybuilding, athletics, body shaping, skiing, Nordic walking, pilates, football, handball, volleyball, swimming, pump, rugby, self-defense, shape, squash, stretch-one, ballroom dancing, table tennis, tennis, functional training, health-promoting training, mountain hiking, cycling tourism, floorball, rowing, climbing, corrective classes, Zumba, corrective classes for students with disabilities.

Calculation of ECTS points

Activity form	Activity hours
Classes	30
Student workload	Hours 30



Financial Accounting in the Organizational Decision Making Process
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.24PS.01780.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory in specialty</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 3</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 2 ECTS, Graded credit • Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has an ordered knowledge of the object, scope and principles of financial accounting, about economic operations of organizations, and the accounting principles of their documentation and recording.	K1_ZARZ_W10, K1_ZARZ_W27
PEU_W02	Characterizes elements of organization of an accounting process and know foundations of financial reporting, and components of financial statements (balance sheet, profit and loss statement, cash flow statement)	K1_ZARZ_W10
In terms of skills		
PEU_U01	Is able to apply in practice the principles of transaction analysis, to record transactions in the ledger, to close books, and to prepare components of financial statements (balance sheet, profit and loss statement).	K1_ZARZ_U14, K1_ZARZ_U16

In terms of social competences		
PEU_K01	Appreciates the significance of accounting as a language of business in the economic activity.	K1_ZARZ_K04, K1_ZARZ_K06

Program content ensuring learning outcomes

The aim of the course is to acquire knowledge about accounting principles, methods of assigning business operations, formal (legal) and/or generally accepted requirements for accounting and financial reporting. Students will acquire the ability to assign business operations, record them in accounting accounts, close books and prepare financial statements.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparation for classes	10
Self-study of class topics	10
Preparation for an exam/credit	10
Student workload	Hours 75



Marketing in the Information Society
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.24PS.01781.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory in specialty</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 3</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 3 ECTS, Exam • Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Recognizes how the principles of marketing are influenced by a variety of social, technological, cultural and economic issues.	K1_ZARZ_W09
PEU_W02	Identifies the objectives and problems in digital and international marketing channels.	K1_ZARZ_W08
PEU_W03	Classifies and selects appropriate tools for implementing marketing strategy.	K1_ZARZ_W27
In terms of skills		
PEU_U01	Plans and applies marketing activates using up-to-date references and modern methods of communication	K1_ZARZ_U14
PEU_U02	Coordinates marketing activities	K1_ZARZ_U16
In terms of social competences		

PEU_K01	Identifies communication issues in modern marketing and digital media	K1_ZARZ_K06
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Program content ensuring learning outcomes

The purpose of the course is to familiarize students with the changes and challenges that arise within the marketing concept and its implementation in modern enterprises. Students learn to analyze and design the marketing strategy of modern enterprises, with a special focus on digital marketing. In the course of the lecture, students are introduced to the principles of comprehensive analysis of activities in the field of building product, pricing, promotion and distribution strategy. Students learn about marketing trends, challenges, methods and techniques. During the classes, students are tasked with creating a comprehensive marketing strategy for a selected product.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Credit/Exam	4
Preparaton for classes	15
Preparation for an exam/credit	6
Preparation of a report/summary/presentation/paper	30
Self-study of class topics	10
Student workload	Hours 125



Knowledge Management in the Organization
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.24PS.01782.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory in specialty</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 3</p>	<p>Activities, hours, ECTS and examination • Seminar: 30 h, 2 ECTS, Graded credit</p>
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has the ability to measure knowledge management processes and intellectual capital within enterprises using appropriate frameworks and tools. Can use analytical skills to evaluate the impact of knowledge management and organizational culture on organizational innovation and competitiveness.	K1_ZARZ_W21
In terms of skills		
PEU_U01	Is able to identify and evaluate individual knowledge management processes in the enterprise using appropriate models or frameworks. Is able to identify and critically assess key tangible and intangible resources, such as human capital, technology, and organizational culture, that influence the organization's capacity for innovation. Is able to apply basic tools for measuring knowledge and intellectual capital within an enterprise.	K1_ZARZ_U02, K1_ZARZ_U07
In terms of social competences		

PEU_K01	Is able to work in a group and carry out tasks together. Is able to function in various roles in decision-making processes in the company.	K1_ZARZ_K02
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Program content ensuring learning outcomes

During the classes student improves the ability to use the basic measuring knowledge and intellectual capital in a enterprises and deepens the ability to analyze the relationship between knowledge management and organizational culture on the innovativeness of the organization.

Calculation of ECTS points

Activity form	Activity hours
Seminar	30
Conducting literature research	10
Preparation of a report/summary/presentation/paper	10
Student workload	Hours 50



Programming Basics - Python
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.24PS.01783.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 3	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Describes the principles of operation and application areas of scripting languages using Python as an example. Explains the advantages and disadvantages of using scripting languages, illustrated with Python.	K1_ZARZ_W24
In terms of skills		
PEU_U01	Constructs a simple graphical user interface (GUI)	K1_ZARZ_U11
PEU_U02	Solves practical problems using Python programs and effectively debugs, optimizes, and secures their own programs against errors.	K1_ZARZ_U04
In terms of social competences		
PEU_K01	Accepts the importance of continuous learning in the field of computer science	K1_ZARZ_K01

Program content ensuring learning outcomes

Introduction to the basics of procedural and object-oriented programming. Discussion of the development environment that enables the creation of computer programs in a contemporary programming language (Python).

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	30
Preparation for classes	20
Preparation for an exam/credit	10
Self-study of class topics	10
Student workload	Hours 100



Programming Basics - VBA
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.24PS.01784.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 3	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Describes the principles of operation and application areas of VBA. Explains the advantages and disadvantages of VBA.	K1_ZARZ_W24
In terms of skills		
PEU_U01	Constructs a simple graphical user interface (GUI)	K1_ZARZ_U11
PEU_U02	Solves practical problems using VBA programs and effectively debugs, optimizes, and secures their own programs against errors	K1_ZARZ_U04
In terms of social competences		
PEU_K01	Accepts the importance of continuous learning in the field of computer science	K1_ZARZ_K01

Program content ensuring learning outcomes

Introduction to the basics of procedural and object-oriented programming. Enabling the acquisition of skills to automate tasks and create computer programs in the MS Office suite (VBA in MS Excel).

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	30
Preparation for classes	20
Preparation for an exam/credit	10
Self-study of class topics	10
Student workload	Hours 100



Sustainable Development
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.24PS.02586.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 3	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has systematic knowledge of sustainable development goals and methods of assessing their implementation. Identifies areas of the company's activities related to sustainable development issues.	K1_ZARZ_W02
PEU_W02	Knows advanced methods of selecting and analyzing economic data, market data and internal company information used to support the principles of sustainable development.	K1_ZARZ_W27
In terms of skills		
PEU_U01	Analyzes economic and social phenomena related to sustainable development. Is able to identify areas of the company's activities that fit the concept of sustainable growth and related management problems.	K1_ZARZ_U03

PEU_U02	Student independently uses various Polish and foreign-language sources of information. Is able to visualize the collected data and use it to analyze the organization's environment and to solve management problems.	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Student is prepared to independently solve problems related to the implementation of sustainable development goals.	K1_ZARZ_K01

Program content ensuring learning outcomes

The aim of the course is to familiarize students with the history of the concept of sustainable growth and its basic assumptions. Participants will learn about the most important areas and goals of sustainable growth and how to implement them in the company.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Preparation of a report/summary/presentation/paper	10
Self-study of class topics	20
Preparation for an exam/credit	10
Student workload	Hours 100



Market Structures and Their Regulation
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.24PS.01787.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 3</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 2 ECTS, Graded credit • Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Knows and characterizes various market structures. Explains the relationship between market structure and welfare in the short and long run perspective.	K1_ZARZ_W02
PEU_W02	Knows advanced methods for solving decision-making problems and is able to adapt them to various market structures.	K1_ZARZ_W27
In terms of skills		
PEU_U01	Identifies and analyzes the market structure and diagnoses its impact on the organization's activities.	K1_ZARZ_U03
PEU_U02	Uses selected mathematical methods to analyze and solve management problems. Is able to link decisions in the organization with various market structures.	K1_ZARZ_U04

PEU_U03	Student uses independently various sources of information on the structure of selected markets.	K1_ZARZ_U14
PEU_U04	Uses advanced methods to solve managerial problems arising from the organization's activities in various market structures.	K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is aware of the need to develop knowledge of economics. Is properly prepared to solve problems arising from changing market structures.	K1_ZARZ_K01

Program content ensuring learning outcomes

The course aims to familiarize participants with issues in the area of market structures and their impact on organizational decisions and economic welfare. The student will learn about the analysis of market competitiveness and gain knowledge about market regulations. The course will introduce you to game theory and its application.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Self-study of class topics	20
Preparation of a report/summary/presentation/paper	10
Preparation for an exam/credit	10
Student workload	Hours 100



Mathematical Economics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.24PP.01759.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Subjects of basic education
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 3	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Lists and identifies mathematical models in economics.	K1_ZARZ_W02, K1_ZARZ_W23, K1_ZARZ_W24
PEU_W02	Knows methods for discounting the nominal value of money.	K1_ZARZ_W02, K1_ZARZ_W23, K1_ZARZ_W24
PEU_W03	Identifies factors influencing the price of insurance premiums (policies).	K1_ZARZ_W02, K1_ZARZ_W23, K1_ZARZ_W24
PEU_W04	Selects mathematical models in connection with utility theory for decision-making under uncertainty.	K1_ZARZ_W02, K1_ZARZ_W23, K1_ZARZ_W24

PEU_W05	Understands the mathematical theory of conflict and cooperation (game theory) and its application in the economic world.	K1_ZARZ_W02, K1_ZARZ_W23, K1_ZARZ_W24
In terms of skills		
PEU_U01	Is able to use formal models and evaluate offers from financial institutions in the areas of investments, liabilities, and mortgage loans.	K1_ZARZ_U04
PEU_U02	Calculates the value of a life insurance premium based on an appropriate set of assumptions.	K1_ZARZ_U04
PEU_U03	Constructs choice models for discrete sets of options based on utility theory and decision theory.	K1_ZARZ_U04
PEU_U04	Formulates and solves decision-making problems, such as cost-benefit analysis and choice problems under uncertainty and competition (game theory).	K1_ZARZ_U04
In terms of social competences		
PEU_K01	Is responsible and sensitive to social issues arising in economic and business phenomena and aspects of life.	K1_ZARZ_K01

Program content ensuring learning outcomes

Simple and compound interest. Continuous compounding and regular capitalization. Annual and periodic interest rates. Inflation. Discounting. Annual and periodic discount rates. Investment and purchasing power. Loans and mortgages. Annuities. Cost-Benefit analysis. Bonds. Mortality tables. Life insurance premiums. Short and long-term policies Theory of demand. Elasticity of demand. Consumer surplus. Theory of supply. Types of market. Cost functions. Fixed, variable, marginal and average costs. Equilibrium between supply and demand in competitive and monopolistic markets. Taxation. Income tax. The effect of purchase taxes in competitive and monopolistic markets Mathematical models of decision under uncertainty and risk. Utility theory. Optimisation of utility functions with a single variable in the face of risk. Optimisation of utility functions with two variables based on a budget constraint. Introduction to game theory. Constant-sum games and non-constant-sum games. Games in extensive form (decisions made in succession). Games in matrix form (simultaneous moves). Minimax solutions. Mixed strategies

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparaton for classes	30
Preparation for an exam/credit	21
Credit/Exam	4
Student workload	Hours 100



Organizational Behaviours
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.24PK.01760.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 3	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Seminar: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Knows the determinants and their impact on organizational behavior, including in the context of inter-organizational relations and interactions between organizations and their environment, considering national, international, and intercultural conditions.	K1_ZARZ_W04
PEU_W02	Identifies the methods and objectives shaping organizational behavior and explains the reasons for their changes.	K1_ZARZ_W19
PEU_W03	Knows the models and mechanisms shaping organizational behavior, including the principles of building and functioning of teams, the significance and influence of organizational culture, as well as the tools and systems of communication within the organization.	K1_ZARZ_W18
In terms of skills		

PEU_U01	Is able to identify, analyze, and evaluate key factors shaping organizational behavior and apply typical techniques to influence these behaviors.	K1_ZARZ_U02, K1_ZARZ_U09
PEU_U02	Is skilled in effectively using Polish and foreign-language information sources and techniques for formulating messages, particularly in the field of organizational behavior knowledge.	K1_ZARZ_U14
PEU_U03	Is capable of utilizing toolsets designed for shaping and changing organizational behaviors.	K1_ZARZ_U08
In terms of social competences		
PEU_K01	Is oriented toward ethical and responsible behavior in specific situations within the practice of organizational functioning.	K1_ZARZ_K06
PEU_K02	Is aware of the need to dedicate effort and time to assess situations and factors influencing organizational behavior, as well as the necessity of independently developing knowledge and professional skills in the field of organizational and management sciences. Is capable of independently expanding this knowledge and improving skills.	K1_ZARZ_K01
PEU_K03	Has an accurate understanding of the relationships between supervisors and subordinates.	K1_ZARZ_K06

Program content ensuring learning outcomes

The course consists of two forms of instruction: a lecture and a seminar. The aim of the course is to understand the essence and regularities of organizational behavior, enabling a better comprehension of the processes and dynamics occurring within organizations. The course also covers the factors determining organizational behavior and evaluates their impact on organizational functioning. Additionally, participants acquire knowledge and skills in managing organizational behavior in contemporary organizations, with the objective of supporting the management of teams and organizational processes in a dynamically changing environment.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Seminar	30
Preparation for classes	15
Preparation of a report/summary/presentation/paper	15
Preparation for an exam/credit	10
Student workload	Hours 100



Foreign Language 1.1
Educational subject description sheet

Basic information

Field of study lektoraty	Education cycle 2025/2026
Speciality -	Subject code PWRSJOS.86JO.01761.25
Organizational unit Wrocław University of Science and Technology	Lecture languages English
Study level first degree	Mandatoriness Elective
Study form full-time studies	Block Foreign languages
Education profile general academic profile	

Semesters Semester 2, Semester 3	Activities, hours, ECTS and examination • Classes: 60 h, 3 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	The student has knowledge, skills and competences specified for the appropriate language level: knows and uses linguistic resources (grammatical, lexical) and those from the academic environment specified at the level; uses general and selective reading and comprehension skills; creates written forms of expression; communicates in family, social, academic and professional environments; develops social competences by working in a group and recognizing the intercultural context.	SJO_S1_U01

Program content ensuring learning outcomes

Classes, topic and grammar related content.

Calculation of ECTS points

Activity form	Activity hours
Classes	60
Preparaton for classes	30
Student workload	Hours 90



Ethics in Business
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000S.24HS.04127.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Subjects from the fields of humanities or social sciences</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 3</p>	<p>Activities, hours, ECTS and examination • Seminar: 15 h, 1 ECTS, Graded credit</p>
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Knows and understands the ethical, humanistic and social determinants of different professional activities.	K1_ZARZ_W16, K1_ZARZ_W17
In terms of skills		
PEU_U01	Applies knowledge concerning ethical aspects of engineering activities, especially in the field of business, analyses in this aspect the activities carried out, verifies and critically analyses in this aspect the information possessed and acquired.	K1_ZARZ_U15
In terms of social competences		
PEU_K01	Identifies ethical aspects of engineering activities, also in terms of business activities, is open to discussions in this respect, supports, advocates and shows initiative in promoting ethical business activities, also in terms of contacts with the public.	K1_ZARZ_K06

Program content ensuring learning outcomes

The course includes a lecture aimed at giving participants the tools to understand and analyse the non-technical aspects of an engineer's activity, including in the business field. In particular, accent is placed on understanding the ethical dimension, as well as the broader cultural context and understanding the fundamental challenges of modern civilisation, in their complexity and deepest layers. With the knowledge acquired, participants will be able to develop the ability to critically analyse the activities of an engineer in a contemporary social context.

Calculation of ECTS points

Activity form	Activity hours
Seminar	15
Preparation for classes	5
Self-study of class topics	5
Student workload	Hours 25



Applied Ethics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.24HS.04128.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Subjects from the fields of humanities or social sciences
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 3	Activities, hours, ECTS and examination • Seminar: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Correctly identifies the ethical aspects related to managerial and technical activities. He/she is able to relate them to universal ethical norms. Understands the distinction between ethical and legal standards.	K1_ZARZ_W16
PEU_W02	Correctly defines and explains an ethical dilemma. Correctly identifies and categorises the ethical dilemmas of modern civilisation.	K1_ZARZ_W17
In terms of skills		
PEU_U01	Is able to identify relevant ethical theory or regulations in the fields of professional ethics and research ethics and use them to formulate arguments, particularly in a situation involving an ethical disagreement or dilemma.	K1_ZARZ_U15
In terms of social competences		

PEU_K01	Respects the principles of professional ethics and expresses judgements formulated based on reliable philosophical/ethical sources and justifying them with reference to relevant ethical theories.	K1_ZARZ_K06
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Program content ensuring learning outcomes

The subject of the course is applied ethics, presented both in the form of theoretical reflection and as practical skills. In the process of learning, students become familiar with the definition and structure of a moral dilemma and reflect on dilemmas from various areas of applied ethics. They are also introduced to selected ethical and legal regulations. The detailed content includes: key concepts of medical ethics, bioethics, professional ethics, research ethics. As a result of participating in the seminars, students learn how to resolve ethical dilemmas, conflicts of interest and disputes. Participation in the course also increases their awareness of ethical and social aspects related to technical and managerial activities.

Calculation of ECTS points

Activity form	Activity hours
Seminar	15
Preparation of a report/summary/presentation/paper	4
Preparation for classes	3
Self-study of class topics	3
Student workload	Hours 25



Contemporary Organizational Methods and Techniques
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.28PS.01788.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 4	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	PEU_W01 has a structured knowledge of organisational processes	K1_ZARZ_W06, K1_ZARZ_W27
PEU_W02	PEU_W02 has a structured knowledge of selected contemporary management methods and techniques	K1_ZARZ_W01, K1_ZARZ_W06, K1_ZARZ_W27
In terms of skills		
PEU_U01	PEU_U01 has the ability to analyse organisational processes	K1_ZARZ_U06, K1_ZARZ_U16
In terms of social competences		
PEU_K01	PEU_K01 correctly identifies and resolves management dilemmas	K1_ZARZ_K02, K1_ZARZ_K04

Program content ensuring learning outcomes

SUBJECT OBJECTIVES

C1 To gain knowledge of contemporary methods and techniques in management.

C2 To understand issues related to organisational processes and selected methods and techniques in management.

C3 To acquire the ability to analyse, measure processes in organisations.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Preparation for classes	5
Preparation of a report/summary/presentation/paper	5
Preparation for an exam/credit	10
Student workload	Hours 50



Investigation of MIS Requirements
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.28PS.01789.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 4	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Names and explains selected methods of identifying and analyzing the elements of the information system in the organization.	K1_ZARZ_W24
PEU_W02	Characterizes and selects appropriate methods for collecting information requirements in order to design/change an IT system for an organization.	K1_ZARZ_W15, K1_ZARZ_W27
In terms of skills		
PEU_U01	Is able to obtain the necessary information and identify and analyze the information needs of information system users.	K1_ZARZ_U14
PEU_U02	Analyzes decisions and documents occurring in the organization.	K1_ZARZ_U16
In terms of social competences		

PEU_K01	Examines and solves problems related to the organization's information systems. Is able to use appropriate tools to obtain and analyze user needs regarding information systems. Using the collected information and professional literature, it determines ways to improve these systems.	K1_ZARZ_K01
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Program content ensuring learning outcomes

During the lecture, students are introduced to the issues of the information system in an organization and the relationship between the organization's information system and the way it functions. They learn the principles of analyzing users' information needs and their importance in designing an IT system for an organization.

During the exercises, students acquire skills in using various techniques for obtaining and documenting users' information needs, as well as analyzing documents and decisions in the organization.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Preparaton for classes	15
Preparation for an exam/credit	5
Student workload	Hours 50



Methods of Management Information Systems Modeling
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.28PS.01790.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 4</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 15 h, 1 ECTS, Graded credit • Laboratory: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has ordered knowledge of the methods and techniques of building models of systems management functions with the structural approach	K1_ZARZ_W15, K1_ZARZ_W24, K1_ZARZ_W27
PEU_W02	Has ordered knowledge of the methods and techniques of building data models of information systems management at the structural approach.	K1_ZARZ_W15, K1_ZARZ_W24, K1_ZARZ_W27
In terms of skills		
PEU_U01	Can create a models of simple computer systems to support management solutions to common problems and issues in the various functional areas of the organization	K1_ZARZ_U14, K1_ZARZ_U16
PEU_U02	Can use software tools to support the design of computer systems models	K1_ZARZ_U14, K1_ZARZ_U16

In terms of social competences		
PEU_K01	Is able to interact and work in a team	K1_ZARZ_K01

Program content ensuring learning outcomes

The student will gain basic knowledge on the management information systems models in various functional areas of the organization

The student will get the skills to apply the right tools for computer-aided modeling of management information systems

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Laboratory	15
Preparation for classes	12
Preparation of a report/summary/presentation/paper	4
Preparation for an exam/credit	4
Student workload	Hours 50



Information Systems Analysis Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.28PS.01791.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 4	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Project: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Presents the possibilities of using IT systems in individual functional areas of the organization in order to improve its information system.	K1_ZARZ_W15, K1_ZARZ_W24
PEU_W02	Distinguishes and characterizes information requirements and selects appropriate tools to obtain these requirements.	K1_ZARZ_W27
In terms of skills		
PEU_U01	Examines and solves problems related to organizational information systems. Is able to use appropriate tools to obtain and analyze requirements for information systems. Using the collected information and professional literature, it determines the directions of changes in these systems.	K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		

PEU_K01	Shows initiative in activities related to expanding his knowledge and professional skills.	K1_ZARZ_K01
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Program content ensuring learning outcomes

During the lecture, students are introduced to the issues of information in organizations (including their business context, components, life cycle, architecture). Students learn the various requirements for a system and methods for obtaining these requirements.

During project classes, students identify and analyze the information system for access to the organization. They plan and implement the possibility of gaining access to information data, for this purpose available independently in the tool.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Project	15
Preparation of a project	15
Preparation for an exam/credit	5
Student workload	Hours 50



Innovation Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.28PS.04129.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 4	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Seminar: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Characterises the concepts and types of innovations and describes their application in various types of organizations. They distinguish innovation processes and explain the essence of building an innovative organization. The student describes and selects the appropriate TRL and BRL levels for technological innovations and illustrates technological innovations using the Deep Tech Radar.	K1_ZARZ_W21, K1_ZARZ_W27
PEU_W02	Justifies the role of ecosystems and innovation platforms in managing open innovation, lists methods of protecting industrial property, and justifies their application.	K1_ZARZ_W03
In terms of skills		

PEU_U01	Analyses innovation management strategies and evaluates the challenges associated with implementing innovations in an organization, searches for and interprets information from specialist literature to analyse real-life cases, applies knowledge about innovation processes, and prepares presentations on the value of innovations.	K1_ZARZ_U14
In terms of social competences		
PEU_K01	Identifies ethical issues related to the implementation of innovations and respects professional ethics principles in designing and implementing innovations.	K1_ZARZ_K06

Program content ensuring learning outcomes

The course provides knowledge on innovation, its theoretical frameworks, types and practical implementation. The course will describe the innovation process and the prerequisites of the organizational environment, leadership skills and individual entrepreneurship to create innovative products. During the course students will also explore the technological advancements and the innovation ecosystems which enhance innovation-related activities.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Seminar	15
Preparation of a project	10
Preparation of a report/summary/presentation/paper	5
Preparation for an exam/credit	5
Student workload	Hours 50



Corporate Finance
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.28PK.01762.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 4	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Describes subject and scope of corporate finance, organizational types of corporations and their features, managerial goals and problems	K1_ZARZ_W04, K1_ZARZ_W10
PEU_W02	Specifies and describes parts and basic components of financial statements, explains their economic meanings and relationships between them	K1_ZARZ_W04, K1_ZARZ_W10
PEU_W03	Defines notions of leverages, methods of their measurement, and explains mechanisms of their functioning in the corporation	K1_ZARZ_W10
PEU_W04	Describes and explains the impact of: a) various cost structures on break-even points and operating profits, b) equity financing compared to debt financing on profitability of corporation.	K1_ZARZ_W10
In terms of skills		

PEU_U01	Calculates and interprets cash flows in accounting versus financial approach	K1_ZARZ_U02, K1_ZARZ_U03, K1_ZARZ_U10
PEU_U02	Performs CVP analysis and calculates break-even points (accounting, cash, financial), and checks impact of sales-mix on break-even points	K1_ZARZ_U02, K1_ZARZ_U03, K1_ZARZ_U07, K1_ZARZ_U10
PEU_U03	For specified data calculates degrees of various leverages, and shows how to applied results obtained in undertaking managerial decisions	K1_ZARZ_U02, K1_ZARZ_U03, K1_ZARZ_U07, K1_ZARZ_U10, K1_ZARZ_U14
PEU_U04	Calculates and interprets effect and impact of financial leverage on return on equity, for various returns on assets compared to various levels of debt financial costs	K1_ZARZ_U02, K1_ZARZ_U03, K1_ZARZ_U07, K1_ZARZ_U10
PEU_U05	Performs financial analysis of financial statements, including among others, calculations of financial ratios, and evaluates values obtained	K1_ZARZ_U02, K1_ZARZ_U03, K1_ZARZ_U10, K1_ZARZ_U14
In terms of social competences		
PEU_K01	Accepts the needs of continuous supplementing the financial knowledge and skills in relation to development of financial securities and globalisation processes	K1_ZARZ_K01
PEU_K02	Identifies problems and expresses opinions about corporate finance management	K1_ZARZ_K01

Program content ensuring learning outcomes

The aim of the course is to present the subject and scope of science about corporate finance. Students learn about financial interpretations of accounting data in financial statements and financial mechanisms functioning in an enterprise. In addition, they will gain knowledge about the methods of analysis and assessment of the financial situation of the company and the methods of managing the basic financial aspects of the efficiency of enterprises.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparation for classes	20
Self-study of class topics	15
Preparation for an exam/credit	20
Student workload	Hours 100



Logistics
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.28PK.01763.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 4	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has structured knowledge of the supply chain and incorporates recent developments in logistics management. Is aware of the importance and forms of logistics processes in performance of business organizations.	K1_ZARZ_W08, K1_ZARZ_W13, K1_ZARZ_W27
In terms of skills		
PEU_U01	Has the ability to identify the factors influencing logistics. Has the ability to carry out economical and optimisation calculations, which are the base to assessing the cost-effectiveness of the supply chain solutions.	K1_ZARZ_U02, K1_ZARZ_U07, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is able to identify and resolve dilemmas and problems related to the logistics profession. Is open to apply sustainable development strategies implemented to supply chains and logistics activities.	K1_ZARZ_K06

Program content ensuring learning outcomes

The aim of the subject is to provide basic knowledge and develop selected skills in the field of logistics management or integrated supply chains (networks) in economic business organizations. During lectures, students will learn the theoretical foundations of logistics, as a constantly developing potential scientific discipline, elements of logistics' systems and processes in supply chains (networks) of economic business organizations, decision-making issues in the area of logistics, e.g. ABC/XYZ classifications, methods of locating logistics centers, JIT planning, inventory control methods (policies), MRP planning in production and transport logistics, as well as methods of analysis, measurement and monitoring of logistics functionality in supply chains. During exercises, students mainly perform computational, analytical and design tasks in the field of optimization in making logistics decisions, purchasing and supply planning, inventory control, production planning, implementation of transport tasks and designing the location and structure of logistics systems. In addition, students present and discuss current methodological problems of the field of logistics knowledge, prospects for its development and application cases of logistics solutions in the practice of businesses.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Preparation for classes	4
Conducting literature research	4
Preparation of a report/summary/presentation/paper	4
Self-study of class topics	4
Preparation for an exam/credit	4
Student workload	Hours 50



Marketing Management
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000S.28PK.01764.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory</p> <p>Block Major-specific subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 4</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 15 h, 1 ECTS, Graded credit • Project: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies different approaches (orientations) of enterprises to marketing activities and explains the essence of marketing management.	K1_ZARZ_W08, K1_ZARZ_W09
PEU_W02	Describes the marketing planning process, taking into account the specifics of the Internet and social media.	K1_ZARZ_W08, K1_ZARZ_W09
In terms of skills		
PEU_U01	Analyzes the degree of implementation of the marketing concept in selected aspects and formulates application conclusions relevant to the marketing management of an enterprise.	K1_ZARZ_U03, K1_ZARZ_U06, K1_ZARZ_U08, K1_ZARZ_U14

PEU_U02	Develops a marketing plan covering the selected scope of the company's activities or introduces the desired changes to the marketing plan and assesses its substantive correctness in the light of the requirements addressed to marketing plans.	K1_ZARZ_U03, K1_ZARZ_U06, K1_ZARZ_U08, K1_ZARZ_U14
In terms of social competences		
PEU_K01	Is focused on developing professional knowledge and skills in the field of management, and in particular - in the field of marketing approach to management and marketing planning.	K1_ZARZ_K01, K1_ZARZ_K06
PEU_K02	Is able to take responsibility for the tasks entrusted to him and his colleagues, not only in the substantive but also ethical dimension.	K1_ZARZ_K02, K1_ZARZ_K03

Program content ensuring learning outcomes

The aim of the course is to familiarize students with the marketing management process, and in particular with marketing planning. The course will discuss the analyses and methods used in this process and the premises in deciding on marketing: goals, strategies, tactics and operational activities.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Project	30
Preparation of a project	10
Preparation of a report/summary/presentation/paper	10
Preparation for an exam/credit	10
Student workload	Hours 75



Operations Management
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000S.28PK.01765.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory</p> <p>Block Major-specific subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 4</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 2 ECTS, Exam • Classes: 15 h, 1 ECTS, Graded credit • Laboratory: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Recognizes and has basic knowledge of the following areas of management theory: 1. Production and productivity 2. Inventory Management 3. Aggregate Production Planning 4. Short-Term Scheduling 5. Material Requirements Planning (MRP)	K1_ZARZ_W08, K1_ZARZ_W12, K1_ZARZ_W27
In terms of skills		
PEU_U01	Has the ability to solve practical and theoretical problems in the following areas of management theory: 1. Production and productivity 2. Inventory management 3. Total production planning 4. Short-term scheduling 5. Material requirements planning (MRP). Has the ability to use Microsoft Excel as well as specialist applications.	K1_ZARZ_U07, K1_ZARZ_U16
In terms of social competences		

PEU_K01	Demonstrates an understanding of the nature of business ethics in his/her oral and written statements. Takes active part in discussions and and works in assigned teams.	K1_ZARZ_K01
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Program content ensuring learning outcomes

The aim of the course is to familiarize students with the basics of operations management. Students learn in particular about production and service management, short- and medium-term scheduling, various models of inventory management, and also MRP and ERP systems.

During lectures, students are introduced to basic definitions, which are immediately illustrated with typical theoretical examples and possible practical applications in various industries and types of organizations.

During laboratory classes, students solve tasks of increasing difficulty using specialist computer software. The aim of the laboratory classes is to build intuition on numerical examples, especially graphs and tables, which are created with each task.

During the problem sessions, students present and discuss various issues and present case studies. In this way, definitions and concepts are once again consolidated and learned anew in the context of historical events and real organizations.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Laboratory	15
Preparation for an exam/credit	20
Credit/Exam	4
Preparation for classes	16
Student workload	Hours 100



Foreign Language 1.2
Educational subject description sheet

Basic information

Field of study lektoraty	Education cycle 2025/2026
Speciality -	Subject code PWRSJOS.8CJO.01766.25
Organizational unit Wrocław University of Science and Technology	Lecture languages English
Study level first degree	Mandatoriness Elective
Study form full-time studies	Block Foreign languages
Education profile general academic profile	

Semesters Semester 3, Semester 4	Activities, hours, ECTS and examination • Classes: 60 h, 3 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	Student has knowledge, skills and competences consistent with the requirements specified for the CEFR level B2 minimum; knows, understands and uses linguistic means (grammatical, lexical and stylistic) typical of academic, specialist and technical languages used in the field of study and used in the academic and professional environment; communicates effectively in interdisciplinary teams, practicing communication, creativity and critical thinking skills; appreciates the need to improve their skills in the field of specialized languages.	SJO_S1_U01

Program content ensuring learning outcomes

B2.2 English, French, Spanish, German
C1.2 English, German
General educational content

Self-presentation and team building, e.g. student's own profile in the context of a technical university and interests in the field of science; effectively presenting yourself, your interests and ideas in academic and professional contexts, interactive team-building tasks.

Presentation on a topic related to the field of study and students' scientific interests - presentation structure, development and discussion of visual materials - charts, tables, illustrations; using characteristic phrases and expressions, presenting a presentation and conducting a discussion related to the presentation.

Preparation for individual and project work with selected issues in a specialized language related to the field being studied - materials selected by students and the instructor.

Language in communication on academic topics using specialized language - e.g. formulating and exchanging views supported by arguments, joining the discussion, paraphrasing the presented content, moving on to subsequent points, summarizing statements, using characteristic phrases and expressions; taking part in various forms of interaction, using various discourse strategies.

Calculation of ECTS points

Activity form	Activity hours
Classes	60
Preparaton for classes	30
Student workload	Hours 90



Internship
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.218PZ.01767.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory elective
Study form full-time studies	Block Internship
Education profile general academic profile	

Semesters Semester 4, Semester 5	ECTS and examination • 6 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of social competences		
PEU_K01	Takes on the challenges of verification (independent) and the necessary deepening of teamwork skills in economic reality	K1_ZARZ_K01, K1_ZARZ_K02, K1_ZARZ_K03
PEU_K02	Demonstrates initiative in familiarizing himself with the range of legal aspects applicable to the given business unit (applicable regulations in terms of the Labor Law, confidentiality, specific internal rules and regulations, etc.) and identifying his activities in this regard by setting them in the proper theoretical context.	K1_ZARZ_K02, K1_ZARZ_K03

Program content ensuring learning outcomes

not applicable

Calculation of ECTS points

Activity form	Activity hours
Preparaton for classes	2
Realizacja praktyki zawodowej	145
Preparation of a report/summary/presentation/paper	3
Student workload	Hours 150



Microstructure of Global Financial Markets
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.210PS.01796.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination • Seminar: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	Is able - using his knowledge and appropriate sources - to correctly diagnose and interpret economic processes, in particular in the context of financial aspects	K1_ZARZ_U04, K1_ZARZ_U10, K1_ZARZ_U14
PEU_U02	Is able to interpret and analyze patterns in financial systems.	K1_ZARZ_U04, K1_ZARZ_U10, K1_ZARZ_U14
PEU_U03	Is able to interpret and analyze patterns in financial systems.	K1_ZARZ_U04, K1_ZARZ_U10, K1_ZARZ_U14
In terms of social competences		
PEU_K01	Analyzes phenomena on the financial market in a comprehensive and independent manner, seeing problems and taking into account current conditions	K1_ZARZ_K01

PEU_K02	Is able to function in various roles in decision-making processes in the company.	K1_ZARZ_K01
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Program content ensuring learning outcomes

This course deals with the foundational and dynamic aspects of financial markets, emphasizing their role in the economy and participant behavior. Topics include the efficient market hypothesis, stochastic models of price dynamics, and wealth exchange mechanisms. The curriculum teaches socio-economic models, self-organizing dynamics, and complex networks to understand the interplay between market structure, speculation, and economic principles.

Calculation of ECTS points

Activity form	Activity hours
Seminar	30
Preparation of a report/summary/presentation/paper	20
Student workload	Hours 50



Leading Project in Modern Organizations
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.210PS.01797.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 3 ECTS, Exam• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	PEK_W01 knows the advantages and disadvantages of traditional and agile project management methodologies	K1_ZARZ_W20, K1_ZARZ_W27
PEU_W02	PEK_W02 zna wybrane metodyki tradycyjne (m. in. PRINCE2) oraz zwinne (w tym SCRUM) zarządzania projektami	K1_ZARZ_W20, K1_ZARZ_W27
In terms of skills		
PEU_U01	PEK_U01: can apply modern methods of project management	K1_ZARZ_U07, K1_ZARZ_U08, K1_ZARZ_U16
PEU_U02	PEK_U02: can manage a portfolio of projects in uncomplicated cases	K1_ZARZ_U07, K1_ZARZ_U16
In terms of social competences		

PEU_K01	PEK_K01 the student is aware of the advantages and disadvantages of different methodologies and project management methods and is able to communicate them to others	K1_ZARZ_K02, K1_ZARZ_K05
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Program content ensuring learning outcomes

SUBJECT OBJECTIVES

C1 to present modern project management methodologies and methods

C2 to raise awareness of the advantages and disadvantages of traditional and agile project management methodologies

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparaton for classes	16
Preparation of a report/summary/presentation/paper	15
Prepararation for an exam/credit	4
Self-study of class topics	20
Student workload	Hours 100



Methods and Tools of Data Analysis
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.210PS.01798.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory in specialty</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 5</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 15 h, 1 ECTS, Graded credit • Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has knowledge in construction and using some quantitative methods and computer technics in data mining useful in business information systems	K1_ZARZ_W24, K1_ZARZ_W25, K1_ZARZ_W27
PEU_W02	Has knowledge of the construction and application of selected business intelligence systems in the decision-making process in an organization.	K1_ZARZ_W24, K1_ZARZ_W25, K1_ZARZ_W27
In terms of skills		
PEU_U01	Is able to identify and analyze the needs of selected decision-makers in the field of data acquisition and analysis in the decision-making process in the environment of management information systems, databases and data warehouses, and selected business intelligence systems.	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16

PEU_U02	Is able to create selected models for solving decision-making problems in the environment of management information systems, databases and data warehouses and selected business intelligence systems and solve them using selected decision-making methods and tools	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is able to independently develop his/her knowledge and skills, cooperate and work in teams, demonstrates readiness to identify, analyze and solve problems in the area of identification and analysis of decision-making problems, creating and solving decision-making models in the environment of management information systems.	K1_ZARZ_K01, K1_ZARZ_K06
PEU_K02	Is able to professionally search for and select methods for solving decision-making problems, take responsibility for them, convey, convince and defend their own views related to the selection and application of mathematical and computer methods and tools in decision-making.	K1_ZARZ_K01, K1_ZARZ_K06

Program content ensuring learning outcomes

1. Acquisition of data mining knowledge in business management processes.
2. Getting skills in choosing and using decision support techniques in practical business problems solving.
3. Getting social skills in information and communication techniques for management.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Laboratory	30
Preparation for classes	10
Preparation of a report/summary/presentation/paper	10
Self-study of class topics	3
Preparation for an exam/credit	7
Student workload	Hours 75



Modern Human Resource Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.210PS.01799.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has an extended knowledge of human resources in organisations. Recognises individual personnel philosophies, policies and strategies, understands their essence and conditions of application. Knows the objectives and conditions of the personnel management process.	K1_ZARZ_W08, K1_ZARZ_W11, K1_ZARZ_W27
PEU_W02	Knows the principles and instruments used in staff selection, development, appraisal and remuneration and understands the determinants of their effective application. Knows the essence and objectives of competence management. Knows the aims and objectives of personnel marketing.	K1_ZARZ_W08, K1_ZARZ_W11, K1_ZARZ_W27
PEU_W03	Explains the nature, meaning and forms of team activities. Knows and interprets the principles of team building and has knowledge of the conditions and principles of team functioning. Knows the roles of the leader and team members.	K1_ZARZ_W18, K1_ZARZ_W27

In terms of skills		
PEU_U01	Is able to obtain sources of information (interview, questionnaire, documentation) and carry out a diagnosis of the existing state in the actual facility in the various areas of personnel management.	K1_ZARZ_U09, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U02	Is able to formulate a practical problem in a selected area of personnel management and solve it using relevant literature sources selected on the basis of a library and Internet search. Has the ability to prepare an expert opinion in the form of a written report. Has the ability to present the results of diagnostic research and defend the conclusions presented.	K1_ZARZ_U07, K1_ZARZ_U09, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is prepared to identify, analyse and resolve problems in relation to the implementation of the HR function.	K1_ZARZ_K01, K1_ZARZ_K04, K1_ZARZ_K05

Program content ensuring learning outcomes

The subject aims to provide students with knowledge of the objectives, instruments and principles of human resource management in organisations and the internal and external conditions of this process. Moreover, it assumes that students will be able to learn the principles and instruments actually applied in particular areas of human resource management in specific organisations (case studies) and to learn innovative ways of improving the process of human resource management and to acquire the skills to apply them.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Preparation for classes	5
Conducting empirical studies	10
Preparation of a report/summary/presentation/paper	15
Preparation for an exam/credit	8
Credit/Exam	2
Student workload	Hours 100



Managing Software Projects
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality Organizational Management</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000ZOMS.210PS.04130.25</p> <p>Lecture languages English</p> <p>Mandatoriness Elective</p> <p>Block Specialty subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 5</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 2 ECTS, Graded credit • Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has ordered knowledge of the the methods of planning of a software project, appropriate analysis techniques for a software project, and design methodology for a programming project	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W02	Has the technique to implement a software project properly	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W03	Understands how to support software projects after implementation as well as ensuring good security	K1_ZARZ_W24, K1_ZARZ_W27
In terms of skills		
PEU_U01	Knows how to develop a business case for a software project as well as be able to determine the size and complexity of the software and the number of expenditures	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16

PEU_U02	Is able to use tools to manage software projects, understand how to model the requirements, data, processes, and objects within a software, design the user interface, data, and software architecture, manage and oversee the system implementation	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U03	Choose the appropriate development strategy based on the software project	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U04	Ensure necessary support and security with the software implemented	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is able to interact and work in a team	K1_ZARZ_K01, K1_ZARZ_K03

Program content ensuring learning outcomes

Students will gain basic knowledge of the information systems tools and techniques involved in systems development. Student will recognize which tool and which technique to use in a given phase of the systems development process and will be able to work in an environment like that of the information technology professionals. Student will understand the impact and implication of the output of their systems development activities to the business organization.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	30
Preparation for classes	32
Preparation of a report/summary/presentation/paper	4
Preparation for an exam/credit	4
Student workload	Hours 100



IT Tools in Project Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.210PS.01801.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Elective
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	knows engineering techniques, methods and technologies useful for managing IT projects	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W02	knows the functionality of IT tools used in solving IT project management problems.	K1_ZARZ_W24, K1_ZARZ_W27
In terms of skills		
PEU_U01	is able to assess the usefulness and apply the selected IT tool to solve IT project management problems	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U02	is able to use the tools to support the planning and monitoring of the project realization	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16

PEU_U03	is able to present (orally and in writing) the adopted and developed solutions relatively flawlessly, participate in discussions and justify the developed solutions	K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	is aware of the need to independently expand his knowledge in the field of IT tools supporting project management.	K1_ZARZ_K01
PEU_K02	is able to interact and work in a team, assuming different roles.	K1_ZARZ_K03

Program content ensuring learning outcomes

The student will gain basic knowledge of the functionality of traditional and modern IT project management tools and knowledge of the principles of using tools and ways to assess their usefulness.

The student will acquire computer-aided project management skills.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	30
Preparation for classes	32
Preparation of a report/summary/presentation/paper	4
Preparation for an exam/credit	4
Student workload	Hours 100



Financial Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.210PK.01768.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Describes and presents time value of money, explains future value and present value notions, explains discounting, notion of annuity, presents characteristics of amortization schedules.	K1_ZARZ_W10
PEU_W02	Defines notions of Net Present Value, of Internal Rate of Return, of Payback Period, Discounting Payback Period, Average Accounting Return, and presents their positive features and drawbacks.	K1_ZARZ_W10
PEU_W03	Describes components and essential aspects of schedules of capital investments, and presents possibilities of their financial effectiveness evaluation, based on selected criteria.	K1_ZARZ_W10
PEU_W04	Explains the relationship between risk and expected return from investment. Describes impact of portfolio diversification on risk reduction.	K1_ZARZ_W08, K1_ZARZ_W10

PEU_W05	Is able to show how to make valuation of exemplary bond and exemplary stock.	K1_ZARZ_W10
PEU_W06	.Presents the Capital Assets Pricing Model, and shows its application.	K1_ZARZ_W10
PEU_W07	Explains the notion of Weighted Average Cost of Capital (WACC), and shows the impact of capital structure on WACC	K1_ZARZ_W10
PEU_W08	Presents problems and methods of current assets and current liabilities management.	K1_ZARZ_W08, K1_ZARZ_W10
In terms of skills		
PEU_U01	Calculates present value and future value of cash flows, annuity value, creates loan amortization schedule.	K1_ZARZ_U04, K1_ZARZ_U07
PEU_U02	Creates capital investments plans and evaluates their financial effectiveness based on NPV, IRR, PB DPB, AAR.	K1_ZARZ_U04, K1_ZARZ_U07, K1_ZARZ_U10, K1_ZARZ_U14
PEU_U03	Performs valuation of bonds and stocks.	K1_ZARZ_U04, K1_ZARZ_U10
PEU_U04	Applies CAPM model for valuation of cost of equity.	K1_ZARZ_U04, K1_ZARZ_U07, K1_ZARZ_U10
PEU_U05	Calculates WACC for different capital structures.	K1_ZARZ_U04, K1_ZARZ_U10
PEU_U06	Elaborates proposals of decisions concerning sources of short-term financing, management of cash, receivables and inventory. Calculates relevant parameters and ratios of efficiency (turnover) and liquidity.	K1_ZARZ_U04, K1_ZARZ_U07, K1_ZARZ_U10, K1_ZARZ_U14
In terms of social competences		
PEU_K01	Is aware of the time value of money and its impact on managerial decisions.	K1_ZARZ_K01
PEU_K02	Understands the impact of managerial decisions on the financial position and income of business company.	K1_ZARZ_K01

Program content ensuring learning outcomes

1. Time value of money and DCF technique (review and extensions).
2. Net Present Value and other capital budgeting criteria in capital investments decisions.
3. Risk and return notions, and valuation of bonds and stock.
4. Cost of capital and capital structure.
5. Net Working Capital management techniques in assuring efficiency and satisfactory liquidity.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	15
Preparaton for classes	10

Self-study of class topics	10
Preparation for an exam/credit	10
Student workload	Hours 75



Marketing Research
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.210PK.01769.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The student defines research problems and presents appropriate approaches to solve them, and classifies marketing research methods.	K1_ZARZ_W09, K1_ZARZ_W15
PEU_W02	The student distinguishes between primary and secondary data and describes data collection techniques in marketing research.	K1_ZARZ_W09, K1_ZARZ_W27
PEU_W03	The student justifies the use of selected statistical methods for analyzing marketing data.	K1_ZARZ_W25, K1_ZARZ_W27
In terms of skills		
PEU_U01	The student develops research tools, such as questionnaires, and adapts them to the requirements of research projects.	K1_ZARZ_U04, K1_ZARZ_U13

PEU_U02	The student analyzes data collected during the research process and interprets results in the context of managerial problems, prepares research reports and demonstrates their results through presentations.	K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	The student demonstrates initiative in teamwork while designing marketing research and analyzing results.	K1_ZARZ_K02, K1_ZARZ_K03
PEU_K02	The student respects professional ethics in the process of data collection and analysis.	K1_ZARZ_K03, K1_ZARZ_K06
PEU_K03	The student is capable of critically assessing their own knowledge and skills in the context of conducting marketing research.	K1_ZARZ_K01, K1_ZARZ_K06

Program content ensuring learning outcomes

The course covers managing the marketing research process and addressing common challenges related to its implementation. Participants will learn to formulate research problems and hypotheses, plan studies, select data analysis methods, and develop research reports. The program emphasizes developing skills in designing and conducting marketing research using both quantitative and qualitative methods. Students will also learn how to effectively present their research findings to decision-makers to support informed marketing decisions.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Preparation for classes	6
Preparation of a report/summary/presentation/paper	9
Preparation for an exam/credit	10
Conducting empirical studies	15
Student workload	Hours 100



Total Quality Management
Educational subject description sheet

Basic information

<p>Field of study Management</p> <p>Speciality -</p> <p>Organizational unit Faculty of Management</p> <p>Study level bachelor's first degree</p> <p>Study form full-time studies</p> <p>Education profile general academic profile</p>	<p>Education cycle 2025/2026</p> <p>Subject code W8NZZZ/000S.210PK.01770.25</p> <p>Lecture languages English</p> <p>Mandatoriness Obligatory</p> <p>Block Major-specific subjects</p> <p>Subject related to scientific research Yes</p>
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<p>Semester Semester 5</p>	<p>Activities, hours, ECTS and examination</p> <ul style="list-style-type: none"> • Lecture: 30 h, 3 ECTS, Exam • Classes: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Has basic knowledge about total quality management principles and quality management systems in organizations.	K1_ZARZ_W14
PEU_W02	Knows basic norms and standards of quality management.	K1_ZARZ_W14
PEU_W03	Recognizes basic tools of quality improvement management.	K1_ZARZ_W14
In terms of skills		
PEU_U01	Has the ability to identify and analyse quality management problems in organisations using the appropriate methods and tools.	K1_ZARZ_U03, K1_ZARZ_U04, K1_ZARZ_U14
PEU_U02	Is able to apply chosen techniques and methods of quality management to analyze, design, and improve an organisation's business processes and the system of quality management.	K1_ZARZ_U03, K1_ZARZ_U04, K1_ZARZ_U14

In terms of social competences		
PEU_K01	Is aware of the importance of individual and team activity in initiation changes in the workplace	K1_ZARZ_K01, K1_ZARZ_K05

Program content ensuring learning outcomes

During the course, the student will acquire basic knowledge of non-standardised and standardised quality management systems and basic quality management techniques and methods. He/she will also acquire practical skills to apply selected quality management tools in solving in solving quality problems of different types of organisations.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Classes	30
Credit/Exam	4
Preparaton for classes	25
Self-study of class topics	10
Preparation for an exam/credit	26
Student workload	Hours 125



Diploma Seminar
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.210PK.00315.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory elective
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 5	Activities, hours, ECTS and examination • Seminar: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	Researches and identifies at the professional level in the organization or its functional areas a managerial problem and plans its solution selecting appropriate methods, techniques and tools to solve the identified problem.	K1_ZARZ_U03
PEU_U02	He is prepared to develop a work in the form of a thesis undergraduate thesis. Evaluates the correctness of the formulated titles, objectives and scope of the work by leading a discussion on the consistency of the above issues. Designs and develops a selected part of the bachelor's thesis.	K1_ZARZ_U13
PEU_U03	Selects appropriate sources of information and professional literature. Analyzes and interprets the information obtained by evaluating its usefulness in solving the problem defined in the work.	K1_ZARZ_U14

PEU_U04	Presents and conducts a discussion substantively justifying its ideas and solutions and indicating potential directions for of further work concerning one's own research, as well as critically evaluates the planned actions and solutions of others while keeping the principles of respect for other people.	K1_ZARZ_U13
In terms of social competences		
PEU_K01	He is open to suggestions to supplement knowledge and skills in the field of expertise, as well as to formulate questions to solve a defined problem and verify his views with experts (e.g., academics, entrepreneurs).	K1_ZARZ_K01

Program content ensuring learning outcomes

The course includes a lecture aimed at preparing students for the completion of their bachelor's thesis in accordance with the faculty's requirements. This involves guidance from the instructor as well as mutual support among students in formulating or refining the topic and objective of their thesis and planning its structure. During seminar sessions, students learn how to write a work that presents their own achievements—starting from identifying a managerial problem, planning tasks to be completed, utilizing appropriate literature sources, selecting suitable research methods and tools, and ultimately conducting research and interpreting results while adhering to the faculty's editorial guidelines. They refine their skills in presenting their ideas, concepts, and proposed solutions in a clear and communicative manner to an audience. Students engage in creative discussions where they can substantiate and defend their viewpoints in a factual and substantive way, highlight key aspects, and address any flawed or overlooked elements of their planned work. Additionally, they have the opportunity to prepare for their final diploma examination.

Calculation of ECTS points

Activity form	Activity hours
Seminar	15
Preparation of a report/summary/presentation/paper	5
Conducting literature research	5
Student workload	Hours 25



Introduction to Risk Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.220PS.01802.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Knows the mechanics of financial markets.	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W02	Knows how to measure statistical properties of financial asset prices.	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W03	Knows how to use financial instruments to manage risk	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W04	Knows how to measure risk.	K1_ZARZ_W24, K1_ZARZ_W27
In terms of skills		
PEU_U01	Can measure volatility of asset prices.	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16

PEU_U02	Can evaluate duration and convexity of bond portfolios.	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U03	Can build stock portfolios.	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U04	Can measure VaR and CFaR.	K1_ZARZ_U04, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is aware of the need for an independent, critical assessment of the scope and level of his/her knowledge in the field of risk management. Is prepared for conducting self-studies in this area.	K1_ZARZ_K01, K1_ZARZ_K06
PEU_K02	Can engage in a discussion and defend his/her views regarding the methods of risk management.	K1_ZARZ_K01, K1_ZARZ_K06

Program content ensuring learning outcomes

The aim of this course is to introduce students to fundamental concepts and methodologies in risk management, with a focus on financial markets and investment decision-making. Students learn about the structure and mechanics of financial markets, including stock and futures exchanges, as well as key financial instruments such as foreign exchange (FX) and debt instruments. During the lectures, they are introduced to statistical techniques for analyzing financial market data, measuring asset price volatility, and evaluating risk using Value-at-Risk (VaR) and Cash Flow-at-Risk (CFaR) models. Students will get familiar with portfolio theory, including diversification strategies and risk-return trade-offs, as well as the concepts of duration and convexity in bond portfolio management. The course emphasizes practical applications of risk measurement and management techniques, preparing students to critically assess and apply financial risk management tools in real-world scenarios. Additionally, students will develop independent analytical thinking and the ability to engage in discussions on risk management methodologies, defending their perspectives with well-founded arguments.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Preparation for classes	8
Preparation for an exam/credit	8
Credit/Exam	4
Student workload	Hours 50



Management and Protection of Intellectual Property
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality Organizational Management	Subject code W8NZZZ/000ZOMS.220PS.01795.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory in specialty
Study form full-time studies	Block Specialty subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Classes: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Correctly justifies the need to manage intellectual property resources in the enterprise	K1_ZARZ_W03, K1_ZARZ_W21
In terms of skills		
PEU_U01	Analyzes intellectual property agreements in a basic scope, recognizes the types of these agreements, the conditions for their validity and effectiveness	K1_ZARZ_U05
In terms of social competences		
PEU_K01	Is aware of the influence of the development of science and technology on the shaping of the intellectual property protection system,	K1_ZARZ_K01

Program content ensuring learning outcomes

The subject is to understand the essence, significance, and role of intellectual property management, as well as the principles of organizing intellectual property protection in an enterprise. The content provided is to enable a deeper use of knowledge to manage intellectual property in an enterprise, taking into account economic and legal aspects of intellectual property protection.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Classes	15
Preparation of a project	20
Student workload	Hours 50



Self-Presentation
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.220PK.01771.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination • Seminar: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Identifies and characterizes various self-presentation tactics and explains their impact on the planned goal of the self-presentation..	K1_ZARZ_W16, K1_ZARZ_W17, K1_ZARZ_W18
In terms of skills		
PEU_U01	Adapts the verbal communication style and non-verbal message to the stated goal and the recipient of the message.	K1_ZARZ_U15
PEU_U02	Selects arguments and method of agreement adequately to the behavior of the other party (interlocutor, co-worker) in professional and everyday life behavior	K1_ZARZ_U09
In terms of social competences		
PEU_K01	Combines his attitude and image with the goals he wants to achieve.	K1_ZARZ_K02, K1_ZARZ_K06

PEU_K02	Demonstrates courage in communicating and defending one's own views. Is prepared to persuade and negotiate in the name of achieving one's own goals	K1_ZARZ_K02, K1_ZARZ_K06
PEU_K03	Is focused on engaging contact with the others, respecting their needs and expectations related to the relation.	K1_ZARZ_K02, K1_ZARZ_K06
PEU_K04	Identifies problems in teams aiming to obtain an adequate role for the teams' competences and resources in the work and groups of audience.	K1_ZARZ_K02, K1_ZARZ_K06
PEU_K05	Is open to looking at the problem from many perspectives, presenting the competence of transdisciplinarity.	K1_ZARZ_K02, K1_ZARZ_K06

Program content ensuring learning outcomes

The aim of the course is improving the ability to consciously create one's own image in line with the goal, social role, including professional role, and building relationships with others. Students will build a sense of self-confidence in the free presentation of content and messages in accordance with the planned goal in various social situations, including professional ones. Students will acquire the ability to prepare and conduct a speech in a consistent and attractive way for the audience, and to establish contact and control the audience. During the seminar classes, students will develop and consolidate social competences in the field of coping with difficult situations.

Calculation of ECTS points

Activity form	Activity hours
Seminar	30
Preparaton for classes	10
Preparation for an exam/credit	10
Student workload	Hours 50



Business Process Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.220PK.01772.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 15 h, 1 ECTS, Graded credit• Laboratory: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Explains the essence and basic models of the processes management in organizations.	K1_ZARZ_W08
PEU_W02	Knows the basic methods of design, analysis, modeling and evaluation of business processes.	K1_ZARZ_W15
In terms of skills		
PEU_U01	Is able to practically apply basic tools for designing, analysing, assessing and improving organization's processes in hipotetical organisation.	K1_ZARZ_U04, K1_ZARZ_U06
In terms of social competences		

PEU_K01	Is responsible for the assigned tasks, ensuring their timely completion, maintaining the required quality standards, and effectively addressing any challenges that may arise during their execution.	K1_ZARZ_K03
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Program content ensuring learning outcomes

The aim of the course is to acquire students' knowledge of the essence of the process approach in organisational management, as well as models of process management in organisations and the implementation of the process approach in organisational management. Students also acquire skills in the practical application of selected process management instruments to design, evaluate and improve organisational processes.

Calculation of ECTS points

Activity form	Activity hours
Lecture	15
Laboratory	15
Preparation for classes	10
Self-study of class topics	5
Preparation for an exam/credit	5
Student workload	Hours 50



Financial Analysis
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.220PK.01773.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Laboratory: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Describes the goals, functions and areas of financial analysis and its importance for the functioning of the enterprise.	K1_ZARZ_W10
PEU_W02	Identifies and describes the tools, methods and techniques used in financial analysis for the financial assessment of enterprises.	K1_ZARZ_W24, K1_ZARZ_W27
PEU_W03	Explains the basic financial mechanisms operating in the enterprise and their importance for the financial situation.	K1_ZARZ_W10, K1_ZARZ_W27
In terms of skills		
PEU_U01	Examines financial statements, selects and uses the information contained therein in order to conduct financial analysis of enterprises.	K1_ZARZ_U04, K1_ZARZ_U14

PEU_U02	Selects and calculates financial indicators and analyzes and interprets the obtained results.	K1_ZARZ_U04, K1_ZARZ_U10, K1_ZARZ_U14
PEU_U03	Prepares an assessment of the company's financial situation and indicates areas and solutions to improve the company's financial situation.	K1_ZARZ_U06, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is open to the constantly changing legal, economic and social conditions that affect the financial situation of the enterprise.	K1_ZARZ_K01

Program content ensuring learning outcomes

The subject focuses on introducing the main issues in the field of financial analysis. Familiarizes the student with the tools and methods used to assess the financial situation of an enterprise. The subject develops the student's analytical skills necessary to conduct a comprehensive analysis of financial statements.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	15
Preparation for an exam/credit	20
Preparation of a project	10
Student workload	Hours 75



Information Systems in Management
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.220PK.01774.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination <ul style="list-style-type: none">• Lecture: 30 h, 2 ECTS, Graded credit• Laboratory: 15 h, 1 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	knows the different classes of management information systems	K1_ZARZ_W24, K1_ZARZ_W26
PEU_W02	knows the principles of selecting and implementing a management information system	K1_ZARZ_W26, K1_ZARZ_W27
In terms of skills		
PEU_U01	Can prepare a plan for the implementation of a management information system	K1_ZARZ_U06, K1_ZARZ_U11, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Understanding the importance of business needs when designing and implementing management information systems	K1_ZARZ_K01, K1_ZARZ_K05

Program content ensuring learning outcomes

As part of the lecture classes, students will acquire knowledge about integrated management information systems and about the methodologies and principles of implementing integrated management information systems. As part of laboratory classes, they will additionally learn the practical use of selected management IT systems and the methodology of choosing an IT system.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Laboratory	15
Preparation of a report/summary/presentation/paper	30
Student workload	Hours 75



Management Training
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.220PK.01775.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory
Study form full-time studies	Block Major-specific subjects
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination • Laboratory: 30 h, 2 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	Develops a conceptual framework for the functionality of a basic tool designed to support the company's decision-making process. Defines the specific scope of the decision-making process within which the decision support system will be implemented. Establishes the fundamental assumptions underlying the system's design. Identifies the essential functionalities required to facilitate the management processes of the simulated enterprise.	K1_ZARZ_W08, K1_ZARZ_W15, K1_ZARZ_W27
In terms of skills		
PEU_U01	Is able to solve complex management problems in a simulated enterprise. Understands the role of established priorities in the operation of the enterprise and is able to assess the compatibility of decisions implemented (in the simulated enterprise) in the context of the changing requirements of the environment.	K1_ZARZ_U03, K1_ZARZ_U04, K1_ZARZ_U10, K1_ZARZ_U16

PEU_U02	Can effectively use a self-developed managerial decision support tool in the management of a simulated enterprise.	K1_ZARZ_U04, K1_ZARZ_U10, K1_ZARZ_U14, K1_ZARZ_U16
PEU_U03	Is able to identify and eliminate the main problems concerning the inappropriate choice of analytical methods for estimating the financial and economic performance of simulated enterprises operating in the same market. Is able to carry out the adaptation of selected methods and problem-solving tools to the prevailing situation in the enterprise and in the simulated market in which the enterprise operates.	K1_ZARZ_U03, K1_ZARZ_U14, K1_ZARZ_U16
In terms of social competences		
PEU_K01	Is able to adjust and improve the decision-making process in the simulated enterprise adapting it to the company's development plan. Reads and reacts appropriately to signals sent by the (simulated) market by dynamically changing the way the company is managed in response to new challenges posed by the markets (resources, supply, finance, labour, customers).	K1_ZARZ_K05

Program content ensuring learning outcomes

The primary tool utilized by course participants is a proprietary management simulation game, referred to as COMPANY (replace with the actual name). As part of the course curriculum, a comprehensive overview of the economic system modeled within the game is provided. Participants gain insights into the structure and functionality of the company's decision-making support system, along with its practical implications. Detailed information is shared on quantifiable subsystems, including those related to materials management, production processes, product warehousing, environmental impact, marketing, sales management, and cash flow.

A central component of the course is the COMPANY management simulation game, in which participants assume the role of the company's board of directors. Through this activity, each simulated company receives feedback on the effectiveness of its management processes. This feedback serves as the basis for an in-depth discussion on corporate governance, with key focus areas tailored to address the specific needs and objectives of the participants on the basis of achievements of participants in the role of managers of company in given stage of game.

Calculation of ECTS points

Activity form	Activity hours
Laboratory	30
Preparation for classes	8
Preparation of a project	6
Preparation for an exam/credit	6
Student workload	Hours 50



Bachelor Thesis
Educational subject description sheet

Basic information

Field of study Management	Education cycle 2025/2026
Speciality -	Subject code W8NZZZ/000S.220PD.01776.25
Organizational unit Faculty of Management	Lecture languages English
Study level bachelor's first degree	Mandatoriness Obligatory elective
Study form full-time studies	Block Diploma thesis
Education profile general academic profile	Subject related to scientific research Yes

Semester Semester 6	Activities, hours, ECTS and examination • Diploma thesis: 30 h, 14 ECTS, Graded credit
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Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	They identify, characterize, and select methods, techniques, and tools appropriate for solving the managerial problem addressed in the thesis.	K1_ZARZ_W27
In terms of skills		
PEU_U01	They analyze the identified managerial problem, indicating its causes, and plan its resolution using appropriately selected methods, techniques, and tools.	K1_ZARZ_U03, K1_ZARZ_U04, K1_ZARZ_U16
PEU_U02	They apply methods, techniques, and tools appropriate to the topic, objective, and scope of the thesis to solve the managerial problem identified in the thesis.	K1_ZARZ_U04, K1_ZARZ_U16

PEU_U03	They search for and analyze information based on literature studies, source documents, databases, and other appropriately selected sources, citing them according to established guidelines to develop a professional work in the form of a bachelor's thesis. They analyze examples of research based on literature studies and/or replicate them.	K1_ZARZ_U13, K1_ZARZ_U14
PEU_U04	They plan their individual work effectively and efficiently to develop the thesis. They collaborate with their thesis supervisor and, depending on the topic of the thesis, with other entities, such as representatives of the organization being studied.	K1_ZARZ_U07
PEU_U05	They formulate conclusions based on the research and propose recommendations and/or alternative solutions to the managerial problem addressed in the thesis. They present the obtained results using appropriate methods, techniques, and tools, and indicate directions for further research.	K1_ZARZ_U06, K1_ZARZ_U13
In terms of social competences		
PEU_K01	They are capable of independently solving professional problems, demonstrate initiative, and are open to collaborating with other entities, such as experts in the given field.	K1_ZARZ_K01
PEU_K02	They are communicative, defend their own views, and express opinions in a professional manner, adhering to accepted ethical principles.	K1_ZARZ_K06

Program content ensuring learning outcomes

The aim of the course is to develop a concise work (thesis) based on the knowledge acquired during undergraduate studies, practical skills, gathered literary information, completed analytical and design tasks, or the results of professional-level research work.

Under the guidance of a supervisor, the student strengthens their skills in acquiring and utilizing scientific and technical information, refines the managerial problem, and defines the objective of their work. Subsequently, they diagnose the formulated problem, identifying its dysfunctions and possible directions for improvement. The student selects research methods appropriate for solving or analyzing the problem. They develop a professional piece of work in accordance with departmental requirements, working closely with the supervisor. As a result, the student achieves professional-level proficiency in solving managerial problems.

Calculation of ECTS points

Activity form	Activity hours
Diploma thesis	30
Conducting literature research	70
Preparation of a project	100
Conducting empirical studies	50
Preparation for an exam/credit	40
Preparation of the thesis	60
Student workload	Hours 350



Sport activities 2
Educational subject description sheet

Basic information

Field of study wychowanie fizyczne	Education cycle 2025/2026
Speciality -	Subject code PWRSWFS.83CWF.04469.25
Organizational unit Wrocław University of Science and Technology	Group of classes Yes
Study level first degree	Lecture languages English
Study form full-time studies	Mandatoriness Elective
Education profile general academic profile	Block Physical education classes

Semesters Semester 3, Semester 4, Semester 5, Semester 6	Examination Graded credit	Number of ECTS points 0.0
	Activities and hours Classes: 30	

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	The participant knows how to organize health-promoting training according to his or her interests, using the principles of a selected sports discipline or form of recreation.	SWF_S1_U01
PEU_U02	The student knows training methods that develop motor skills using their own body weight and various equipment.	SWF_S1_U01
PEU_U03	The student knows the basic technique of shaping exercises needed to prepare the body for physical exercise.	SWF_S1_U01
PEU_U04	The student knows the basic rules of safe behavior during physical activity.	SWF_S1_U01
PEU_U05	The student is able to develop a short- and long-term training plan adequate to his or her abilities.	SWF_S1_U01

PEU_U06	The student knows the principles of strengthening the deep and peripheral stabilization apparatus and the technique of basic exercises shaping aerobic and strength capacity.	SWF_S1_U01
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Program content ensuring learning outcomes

Sports activities – ABT, aikido, badminton, bodyART, body ball, Brazilian Jiu Jitsu, Callanetics, cuban salsa fit, futsal, yoga, jogging, judo, karate, basketball, bodybuilding, athletics, body shaping, skiing, Nordic walking, pilates, football, handball, volleyball, swimming, pump, rugby, self-defense, shape, squash, stretch-one, ballroom dancing, table tennis, tennis, functional training, health-promoting training, mountain hiking, cycling tourism, floorball, rowing, climbing, corrective classes, Zumba, corrective classes for students with disabilities.

Calculation of ECTS points

Activity form	Activity hours
Classes	30
Student workload	Hours 30