Subject card

Subject name and code	Information Systems in Accounting , PG_00156872		
Field of study	Finance and Accounting		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2026/2027
Education level	Bachelor’s studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	5	ECTS credits	7.0
Learning profile	academic	Assessment form	exam
Conducting unit	Department of Accounting -> Faculty of Management -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Beata Zackiewicz-Brunke	
	Teachers		

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	30.0	15.0	0.0	0.0	75
	E-learning hours included: 0.0						

Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
	Number of study hours	75	14.0	86.0	175

Subject objectives	1. A. Ability to identify and describe the main economic processes in the enterprise B. Ability to determine the role of information in the management of the organization and to indicate the basic information needs of the company C. Ability to determine the place and role of the accounting IT subsystem in the integrated IT system supporting the management of the organization. D. Bookkeeping on general ledger accounts and subsidiary ledger accounts of economic operations related to: a) income, outflows and consumption (depreciation write-offs) of tangible, intangible and legal assets, b) accounting for the purchase of materials and goods using the actual purchase prices or the inventory prices, c) receivables and payables, d) turnover of monetary assets, e) accruals and deferred income, f) equity, including basic, supplementary and reserve funds, including capital share, reserves and provisions, g) the classification and presentation of income and gains, costs and losses in the profit and loss account, prepared on a line-by-line and comparative basis, h) the recognition of production costs by nature and function and their allocation to the cost of finished goods and work in progress, i) recognition of selling and general administrative expenses, j) the classification and recognition of operations relating to the sale of goods, merchandise and services, k) other operating income and expenses, l) financial operations, m) calculation of the financial result by the statistical method and determination of the financial result by the accounting method. E. Preparation of a statement of turnover and balances of the general ledger accounts and a statement of the balances of the subsidiary accounts. F. Correcting accounting errors. G. Evaluating the accuracy of the various elements of the accounts using information systems. H. Determining the location of accounting records and the storage of sets of accounting records, including ledgers, accounting evidence and financial statements. 2. A. Use of statistical methods in sampling for internal control and audit. B. The use of methods and techniques to control and audit specific areas of the entity's operations and components owned by the entity. C. Analysis of risks and opportunities of the organisation using a risk management system and risk management advice. D. Use of internal control and internal audit in the management process. E. Analysis, evaluation and design of the structure and operation of internal control to ensure the integrity and correctness of the accounts and the proper quality of the information reported in financial and other reports. F. Analysis of the fit between the basic IT control tools and the application control tools used.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[FiRL3_W07] The student has advanced knowledge of norms and rules (legal, organizational, moral and ethical) in finance and accounting. Knows and understands the concepts and principles of industrial property protection and copyright law.	The student has knowledge of (legal, organisational, moral and ethical) norms and rules concerning information systems in accounting. The student knows and understands the concepts and principles of bookkeeping with the use of information technology and computer systems and internal control within the accounting system.	[SW4] test/exam - oral or written [SW2] presentation/project/paper/report
	[FiRL3_W06] The student has advanced knowledge of methods and tools, including data acquisition and analysis techniques, appropriate to management science and quality, which allow describing economic structures and institutions and the processes within and between them.	The student is familiar with sources of data necessary to carry out internal control. He/she knows techniques, methods and procedures of internal control and internal audit, including statistical methods in control and audit.	[SW4] test/exam - oral or written [SW2] presentation/project/paper/report
	[FiRL3_U03] The student can properly analyse the causes, course and effects of specific processes and phenomena in finance and accounting, using advanced theories and relevant social sciences methods. Can identify stakeholders of processes and phenomena from the disciplines of management and quality sciences and economics and finance.	The student is able to identify the basic information needs of a business in terms of bookkeeping using information technology and computer systems. Is able to analyse, evaluate and design internal control structures and operating principles.	[SU2] presentation/project/paper/report [SU4] test/exam - oral or written
	[FiRL3_K01] Self-development: - understands the need for development and lifelong learning - is able to supplement and improve the acquired knowledge and skills - knows his strengths and weaknesses, sets ambitious goals to the best of his ability - knows how to accept failure and admit mistakes.	The student understands the necessity of continuous expansion and improvement of knowledge in the area of information systems in accounting and internal control systems. He/she is able to expand and improve the acquired knowledge and skills related to bookkeeping with the use of information technology and computer systems as well as internal control and audit.	[SK4] test/exam - oral or written [SK8] observation of student's independent or team work
	[FiRL3_U02] The student can acquire data from various sources to analyze specific economic processes and phenomena related to finance. Is able to use information technologies.	The student is able to use information technology and computer systems for bookkeeping.	[SU2] presentation/project/paper/report [SU4] test/exam - oral or written
	[FiRL3_K06] Creativity: - thinks creatively, is able to go beyond the usual patterns, - is able to think and act in an entrepreneurial manner, - is able to adapt flexibly to the requirements of the environment.	The student thinks creatively in adapting selected information technology and computer systems for bookkeeping.	[SK2] presentation/project/paper/report [SK4] test/exam - oral or written
	[FiRL3_K05] Responsibility: - meets deadlines - is able to properly identify priorities for the implementation of the task set by him - consistently strives to achieve the set goal - is able to work systematically and independently - observes the rules and norms of social coexistence.	The student meets deadlines related to the completion of tasks in class. He/she is able to work systematically and independently.	[SK4] test/exam - oral or written [SK8] observation of student's independent or team work

	Course outcome	Subject outcome	Method of verification
	[FiRL3_U05] The student correctly uses normative systems and selected norms and rules (legal, professional, moral) to solve advanced problems in finance.	The student understands and correctly applies accounting principles in bookkeeping using information technology and computer systems. He/she is able to identify the relationship of internal control with accounting and to select appropriate internal control instruments to ensure the reliability of the accounts.	[SU2] presentation/project/paper/ report [SU4] test/exam - oral or written
	[FiRL3_K04] Integrity: - abides by business ethics - respects the law - is objective, is able to recognize conflicts of interest - correctly identifies and resolves dilemmas related to the practice of the profession.	The student is aware of and understands the need to behave in an ethical and socially responsible manner in professional life. He/she correctly identifies and resolves dilemmas related to the accounting profession.	[SK4] test/exam - oral or written [SK8] observation of student's independent or team work

Subject contents	**1. Bookkeeping using information technology and computer systems** 1.1 Economic processes in the company 1.2 The role of information in business management 1.3 Information needs of the company 1.4 Typology of management support information systems 1.5. Place of the accounting subsystem in the integrated management system supporting management 1.6. The subjective scope of the obligation to keep accounts. 1.7. Obligatory elements of accounts maintained using information technology and computer systems: a) journal (functions and principles of keeping by different accounting techniques), b) general ledger accounts (principle of double entry, functions of the general ledger accounts, principles and time limits for opening, maintaining and closing the general ledger accounts in the various accounting techniques), c) subsidiary accounts (purposes, forms and scope of subsidiary accounts, ways of keeping subsidiary accounts, rules and time limits for opening, keeping and closing subsidiary accounts in the various accounting techniques), d) the summary of turnover and balances of the general ledger accounts and the summary of balances of auxiliary ledger accounts, e) principles of reconciliation of accounts, f) correction of accounting errors. 1.8. Criteria for evaluating accounting information systems: a) the way in which the basic principles of double-entry bookkeeping are implemented, b) compliance with legal provisions, c) adaptation of information functions to the needs of the entity. 1.9. Criteria for considering accounting ledger to be kept reliably, error-free, verifiable and up-to-date. 1.10. The place where the accounting ledger is kept and the rules for keeping the accounting books. 1.11. Responsibility for bookkeeping. **2. Internal control** 2.1. Internal control system: a) the concept, purpose and objectives of internal control and internal audit, b) subject matter, scope and stages of the control process and its organisation, c) methods, techniques and procedures of internal control and internal audit, including statistical methods in statistical methods in control and audit, d) internal control and business risk and uncertainty e) audit findings and follow-up f) internal control and internal audit as management support instruments. 2.2. The operation of internal control and the quality of the accounting books and financial statements: a) the relationship of internal control to accounting, b) the control functions of accounting and financial reporting, c) elements and instruments of internal control to ensure the integrity of accounting and financial reporting, d) internal control in an information technology environment.
Prerequisites and co-requisites	The student should have knowledge and skills in financial accounting and cost accounting

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	The condition for taking the final exam is to obtain a positive grade for the final work (project).	51.0%	0.0%
	Written examination with problem tasks and test questions The detailed conditions are determined by the lecturer at the beginning of the semester.	51.0%	100.0%

Recommended reading	Basic literature	**A.1. wykorzystywana podczas zajęć** 1. Autorskie materiały dydaktyczne prowadzących zajęcia 2. https://przemyslawlech.academia.edu/- teaching materials 3. Lech P. Zintegrowane systemy zarządzania ERP/ERPII, Difin, 2003, wersja on-line dostępna na https://przemyslawlech.academia.edu/ 4. Szczepankiewicz E., Kontrola wewnętrzna i audyt wewnętrzny w jednostkach; Uniwersytet Ekonomiczny w Poznaniu; Wydawnictwo UEP, 2021. **A.2. studiowana samodzielnie przez studenta** 1. Wrycza S., Maślankowski J.W (red) Informatyka Ekonomiczna, PWN, Warszawa 2019 2. Saunders, Edmund J., Kamińska U., Kontrola Wewnętrzna - Zintegrowana Struktura Ramowa. PIKW, 2008. 3. Zarządzanie Ryzykiem Korporacyjnym - Zintegrowana Struktura Ramowa. T. 1, Streszczenie dla kierownictwa / COSO The Committee of Sponsoring Organizations of the Treadway Commission. Sigmeo, 2015. 4. Winiarska K., Audyt Wewnętrzny: Teoria i Zastosowanie; Difin, 2019.
	Supplementary literature	1. Dyhdalewicz A., Hołownia K., Kontrola wewnętrzna jako narzędzie realizacji zasady wiarygodności informacji prezentowanych w sprawozdaniu finansowym, Akademia Zarządzania 2019, 3(4), s. 30-50.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	