Study Program

Starting from 2026/2027 academic year

Faculty of Information Management

Program name: Information Management

Degree: bachelor's

Mode: full-time

Legal basis

Art. 53 and Art. 67 of the Act on Higher Education and Science of July 20, 2018 (Journal of Laws 2018, item 1668), Regulation of the Minister of Science and Higher Education of September 27, 2018 on studies, and the Regulation of the Minister of Science and Higher Education of November 14, 2018, on the characteristics of second-cycle learning outcomes for qualifications at levels 6–8 of the Polish Qualifications Framework.

Program Name: Information Management

Level: first cycle; 6 PQF

Profile: practical

Mode: full-time

Language of instruction: English

Program assigned to the discipline: technical computer science and telecommunications (leading discipline), and management and quality sciences

Number of semesters: 7

Number of ECTS credits required to complete the program: 210 (240 including internships)

Professional title awarded to graduates: Bachelor of Engineering

Total number of class hours: 2734 (3454 including internships)

Number of ECTS credits in humanities or social sciences courses: 66

Number of class hours with direct participation of faculty members or other instructors and students: 2810

Total number of ECTS credits assigned to courses related to the university's research activities in the discipline or disciplines to which the degree program is assigned: 145

Number of ECTS credits covered by the study program and earned through elective courses: 75

Description of the degree program:

Program-specific learning outcomes:

The table below presents the full range of learning outcomes specified in the Regulation of the Ministry of Science and Higher Education of November 14, 2018, on the characteristics of second-cycle learning outcomes for qualifications at levels 6–8 of the Polish Qualifications Framework, issued pursuant to Article 68(3) of the Act, defining the educational standard preparing students for the profession relevant to the program of study presented herein.

DESCRIPTION OF EXPECTED LEARNING OUTCOMES

for the field of study Information Management

Bachelor's degree program – practical track

Learning Outcome Number	Category	Reference to domain-specific learning outcomes
KNOWLEDGE: THE GRADUATE KNOWS AND UNDERSTANDS		
K_W01	The graduate knows and understands theory and general research methodology and practical management applications, with particular emphasis on quality management, economics, and finance, necessary in engineering management of an enterprise	P6S_WGOgól1, P6S_WGSpoł1
K_W02	The graduate knows and understands theory and general research methodology in the fields of mathematics, algebra, physics, electronics, geometry, and statistical data analysis required for the implementation of uncomplicated tasks, combining the expertise in both information technology and management	P6S_WGOgól1, P6S_WGSpoł1
K_W03	The graduate knows and understands the nature, place, and meaning of management in the system of sciences of the modern economy and its relationships with other sciences	P6S_WKOgól2, P6S_WGSpoł2
K_W04	The graduate knows and understands the principles of industrial property protection and copyright related to the creation and operation of an enterprise, and forms of individual entrepreneurship development	P6S_WKOgól2, P6S_WKSpoł4, P6S_WKTech2, P6S_WKInż2
K_W05	The graduate has the knowledge of the standards and methods of modeling business processes and information systems of model connections with programming, business operations, and their use in the software development process	P6S_WGTech1, P6S_WGInż1
K_W06	The graduate knows and understands the features of man as the creator of organizational culture, and the entity creating and developing social structures of an enterprise, and the principles of its functioning	P6S_WKOgól2, P6S_WGSpoł3
K_W07	The graduate knows and understands basic economic, legal, cultural, and ethical determinants of business entities' activities	P6S_WKOgól2

K_W08	The graduate knows and understands basic processes occurring in the product life cycle – the IT system in the enterprise, and the devices it uses	P6S_WGOgól1, P6S_WGTech1, P6S_WGInż1
K_W09	The graduate has the basic knowledge of IT applications in an enterprise	P6S_WGTech1, P6S_WGInż1
K_W10	The graduate knows basic methods, techniques, and tools of solving engineering problems related to the specialization of studies, and understands the non-technical context of their application, in particular:	P6S_WGOgól1, P6S_WGSpoł3, P6S_WGTech1, P6S_WGInż1
K_W10_1*	The graduate knows the context of the project undertaking, as well as the methods, techniques, and tools used in its planning and management	
K_W10_2*	The graduate knows the technical, organizational, social, and legal conditions related to the implementation of IT systems in an enterprise	
K_W10_3*	The graduate knows the technical, organizational, social, and legal conditions related to e-commerce	
K_W10_4*	The graduate knows the methods of analyzing the business needs of enterprises	
*K_W10_1	educational outcomes for the Project Management speciality area	
*K_W10_2	educational outcomes for the IT Systems Implementation speciality area	
*K_W10_3	educational outcomes for the E-commerce speciality area	
*K_W10_4	educational outcomes for the Business Analysis speciality area	
SKILLS: THE GRADUATE IS ABLE TO		
K_U01	The graduate can identify and interpret basic organizational processes and phenomena using knowledge of management and ICT	PGS_UWOgól1, P6S_UWSpoł1
K_U02	The graduate can forecast the practical effects of specific organizational processes and phenomena using standard methods and tools in the field of IT and management	PGS_UWOgól1, P6S_UWSpoł2
K_U03	While identifying and formulating the specifications of engineering management tasks in an organization, and conducting these tasks, the graduate can: • use analytical, simulation, and experimental methods • see their system and non-technical aspects	P6S_UWOgól1, P6S_UWTech2, P6S_UWInż1

	• make a preliminary economic assessment of the proposed solutions and undertake engineering activities	
K_U04	The graduate can properly use normative systems to solve tasks in the fields of IT and management	P6S_UWOgól1, PGS_UWSpoł3
K_U05	The graduate can use the experience gained in the environment professionally engaged in engineering activities in the maintenance of the company's IT infrastructure	P6S_UWOgól1, PG6_UWTech6, P6S_UWinż1
K_U06	The graduate can plan and carry out computer calculations and simulations regarding enterprise management, and can interpret obtained results and draw conclusions	P6S_UWOgól1, P6S_UWTech1, P6S_UWInż1
K_U07	The graduate can design – in accordance with the given specification – and implement a business and IT system typical for engineering information management, using appropriately selected methods, techniques, and tools	P6S_UWOgól1, P6S_UWTech4, P6S_UWInż1
K_U08	The graduate can communicate in Polish and English at the B2 level of the Common European Framework of Reference for Languages, using specialized terminology in the area of management and Information Technology, and take a constructive part in debates on problems typical for engineering management of an enterprise	P6S_UKOgól2
K_U09	The graduate can solve practical engineering tasks that require the use of engineering standards and norms, and information technology, taking advantage of the experience gained in the environment professionally engaged in engineering activity	P6S_UWOgól1, P6S_UWTech5, P6S_UWInż1
K_U10	The graduate can critically analyze the functioning of existing technical solutions, can formulate their assessment, and propose new solutions, in particular:	P6S_UWOgól1, P6S_UWTech3, P6S_UWInż1
K_U10_1*	The graduate can plan and monitor the implementation of unique team ventures, taking into account all dimensions that determine them	
K_U10_2*	The graduate can plan the implementation of an IT system in an enterprise and prepare implementation documentation	
K_U10_3*	The graduate can diagnose the company's needs, plan the implementation, and manage the operation of systems related to e-commerce	

K_U10_4*	The graduate can diagnose the company's technical, organizational, and social needs and assess their legitimacy in economic terms	
K_U11	The graduate can conduct research aiming at solving a complex engineering problem or assess existing solutions related to the specialization of studies, using analytical, simulation, or experimental methods	P6S_UWOgól1, P6S_UWTech3, P6S_UWInż1
K_U12	The graduate can plan and organize individual and team work	P6S_UOOgól3
K_U13	The graduate can independently plan and implement their lifelong learning	P6S_UUOgól4
*K_U10_1	educational outcomes for the Project Management speciality area	
*K_U10_2	educational outcomes for the IT Systems Implementation speciality area	
*K_U10_3	educational outcomes for the E-commerce speciality area	
*K_U10_4	educational outcomes for the Business Analysis speciality area	
SOCIAL COMPETENCIES: THE GRADUATE IS READY TO		
K_K1	The graduate makes a critical evaluation of the content presented and independently supplement his/her knowledge using specialist literature, the Internet, and expert knowledge	P6S_KKOgól1
K_K2	The graduate pursues his/her goals, combining creativity and entrepreneurship with the ability to compromise, and taking into account social obligations	P6S_KOOgól2
K_K3	The graduate performs assigned tasks, respecting professional ethics and relying on good practice in the professional environment	P6S_KROgól3

List of required courses:

No.	Course name	Code	Hours		Year1		Year 2		Year 3		Year 4	ECTS
			L	C	I	II	III	IV	V	VI	VII	
SEMESTER 1												
1	**English 1**	ANG1		60	Z							3
2	**History and Culture of Japan**	HKJ	30		Z							2
3	**Foundations of Management and Organisation 1**	PPZ1	30	30	E							4
4	**Mathematics 1**	MAT1	15	30	E							4
5	**Architecture of Computer Systems**	ASK	30	30	Z							3
6	**MS Office Suites**	PAB	15	30	Z							3

No.	Course name	Code	Hours		Year1		Year 2		Year 3		Year 4	ECTS
			L	C	I	II	III	IV	V	VI	VII	
7	**Foundations of IT and Programming in Management**	PIP	30	30	Z							4
8	**Microeconomics**	MIK	30	30	E							4
9	**Occupational Health and Safety**	BHP	4		Z							-
	SEMESTER 2											
10	**English 2**	ANG2		60		Z						3
11	**Mathematics 2**	MAT2	15	30		E						4
12	**Object-Oriented Programming**	PGO	30	30		Z						4
13	**Foundations of Marketing**	PMR	15	30		Z						2
14	**Foundations of Management and Organisation 2**	PPZ2	30	30		E						4
15	**Multimedia Technologies**	TEM	30	30		Z						3
16	**Accounting of Business Entities**	RPGO	30	30		Z						3
17	**Legal Foundations of Business**	PPB	15	15		Z						2
	SEMESTER 3											
18	**English 3**	ANG3		60			Z					3
19	**Databases 1**	BAZ1	30	30			E					4
20	**Physics**	FTO	30	30			E					4
21	**WWW Pages and Portals Design**	SSW	15	15			Z					3
22	**Statistical Data Analysis**	SAD	30	30			E					4
23	**Market Research**	BRM	15	15			Z					3
24	**Organisational Behaviour**	ZAO	15	15			Z					2
25	**Information Technologies in Management**	TIF	15	15			Z					2
26	**Information Systems Design**	PRI	30	30			E					4
	SEMESTER 4											
27	**Databases 2**	BAZ2	30	30				E				4
28	**Digital Systems and Foundations of Electronics**	SCE	30	30				Z				4
29	**Human Resources Management**	ZZL	15	15				Z				3
30	**Finance in Enterprises**	FWP	15	15				Z				3
31	**Computer Networks and Information Systems Security**	SKB	30	30				E				4
32	**Business Process Modelling**	MBP	30	30				Z				4
33	**Quality Management**	ZAJ	15	15				Z				3
34	**Physical Education**	WF1		30				Z				-
	SEMESTER 5											
35	**IT Project Management**	ZPR	30	30					E			5
36	**Human-Computer Interaction**	ICK	30	30					E			4
37	**Intelligent Management Systems**	ISZ	30	30					Z			4
38	**Enterprise Resource Planning Systems**	ERP	30	30					Z			5
39	**Physical Education**	WF2		30					Z			-
	SEMESTER 6											
40	**Information Systems Creation, Integration and Testing**	WYT	30	30						E		4
41	**Protection of Intellectual Property**	OWL	30							E		4
	SEMESTER 7											
42	**Business Plan and Assessment of Investment Effectiveness**	BIP	15	15							Z	3

Total number of ECTS credits earned from required courses: 135 (excluding internships)

List of elective courses:

Lp.	Nazwa przedmiotu	symbol	godziny		ROK1		ROK 2		ROK 3		ROK 4	ECTS
			w	ć	I	II	III	IV	V	VI	VII	
	SEMESTER 4											
1	**Foreign Language**	LEK		60				Z				3
	SEMESTER 5											
2	**Foreign Language**	LEK		60					Z			3
3	**Technical Subject – Elective (1)****	PTO1	30	30					Z			5
4	**Technical Subject – Elective (2)****	PTO2	30	30					Z			5
	SEMESTER 6											
5	**Foreign Language**	LEK		60						Z		3
6	**Technical Subject – Elective (3)****	PTO3	30	30						Z		5
7	**Humanities Subject - Elective***	PHO	15	15						Z		4
8	**Specialization Course (1)*****	WSP1	30	30						Z		5
9	**Specialization Course (2)*****	WSP2	30	30						Z		5
10	**Seminar 1*****	SEM1		30						Z		9
	SEMESTER 7											
11	**Foreign Language**	LEK		30							Z	3
12	**Monographic Lecture****	MON	30	30							Z	5
13	**Specialization Course (3)*****	WSP3	30	30							Z	5
14	**Final project – Seminar 2 *****	SEM2pd		30							Z	15

Total number of ECTS credits earned from elective courses: 75

*One course to choose from the list (by majority of student's votes): Public Speaking Skills, Stress Management, Business Communication;

** Four courses to choose from the list (by majority of student's votes):
Data Warehouses, Engineering Management, Advanced Information Systems Design, Internet Technologies, Enterprise Resource Planning Systems 2, Programming Workshops, Foundations of Artificial Intelligence, Cloud Computing

***Courses for the specialization track:

Project Management

1. IT Quality and Metrics in IT project
2. Methods and Tools of Project Management
3. Advanced IT Project Management
4. Seminar 1
5. Final project – Seminar 2

IT System Implementation

1. CRM Systems
2. Implementation of Enterprise Management Support Systems
3. Advanced IT Project Management

4. Seminar 1
5. Final project – Seminar 2

E-commerce

1. CRM Systems
2. Online Marketing
3. Advanced Technologies in Internet Trade
4. Seminar 1
5. Final project – Seminar 2

Business Process Analysis

1. Business Intelligence on SAS Platform
2. Implementation of Enterprise Management Support Systems
3. The Use of MS Excel in Business Analysis
4. Seminar 1
5. Final project – Seminar 2

Duration, rules, and format of professional internships, as well as the number of ECTS credits a student must earn through these internships.

All students in the Master's program in Information Management are required to complete 720 hours of professional internships. These internships are worth 30 ECTS credits.

Internships may take place during the academic year, both in Poland and abroad, provided they do not interfere with the student's studies. Students may apply for opportunities listed on the Academic Career Office portal or propose an employer who agrees to host an internship. The nature of the internship must align with the curriculum and enable the achievement of the intended learning outcomes.

Internships may be either paid or unpaid. The university does not cover the costs associated with their organization.

The individuals responsible for verifying and processing internships on behalf of PJATK are the Rector's Representative for Student Internships and the Student Internship Coordinator.

Settlement is based on the Internship Report and additional attachments. As part of professional internships, the following may be settled, for example: paid work, an internship, or volunteer work, provided that the duties performed enable the achievement of the intended learning outcomes and the student holds student status during that time.

Documents for internship verification must be submitted via the Internships module in GAKKO by the relevant deadline prior to the defense. If formal requirements are not met, the internship will not be credited.

Detailed information regarding professional internships can be found in the Student Internship Regulations.