Kielce University of Technology

FACULTY OF MANAGEMENT AND COMPUTER MODELLING

COURSE SPECIFICATION

Course code	full-time studies	**Z-ZB-E-506b**
	part-time studies	**-**
Course title in English	**Digital security**	
Course title in Polish	**Bezpieczeństwo cyfrowe**	
Valid from academic year	**2025/2026**	

PLACEMENT IN THE TEACHING PROGRAM

Programme of study	**BUSINESS MANAGAMENT**
Level of education	**1st degree**
Studies profile	**academic**
Form and mode of study	**full-time programme**
Scope	**e-commerce**
Academic unit responsible for the course	**Department of Management and Organization**
Course coordinator	**mgr inż. Artur Tusień**
Approved by	**dr hab. inż. Dariusz Bojczuk, prof. uczelni**

GENERAL CHARACTERISTIC OF THE COURSE

Teaching block		**Specialist subject**
Course status		**Obligatory**
Language of instruction		**English**
Semester of delivery	full-time studies	**Semester V**
	part-time-studies	**-**
Prerequisites		**The Fundamentals of Computer Science**
Exam (YES/NO)		**NO**
ECTS		**1**

Method of conducting classes		lecture	classes	laboratory	project	other
Number of hours per semester	full-time	**15**				
	part-time					

LEARNING OUTCOMES

Category	Outcome code	Course learning outcomes	Reference to the directional learning effect
Knowledge	W01	The student has knowledge of secure storage, information and data processing, data control and data privacy.	ZB1_W03 ZB1_W08
	W02	The student has knowledge of how to recognize malware threats and how to effectively protect against them.	ZB1_W03 ZB1_W08
	W03	The student has knowledge of how to protect computer networks, how to protect the computer and devices working in the network.	ZB1_W03 ZB1_W08
	W04	The student has knowledge of security issues when using password, email, social networks, VoIP telephony, instant messaging and mobile devices.	ZB1_W03 ZB1_W08
Skills	U01	The student is skilled in recognizing security risks in terms of identity theft, threats to data from online use, including cloud computing.	ZB1_U05 ZB1_U10
	U02	The student is skilled in identifying malware attacks.	ZB1_U05 ZB1_U10
	U03	The student has the ability to use web browsers and their settings securely, to confirm the identity of websites and to use online web services securely.	ZB1_U05 ZB1_U10
	U04	The student is skilled at archiving and restoring files locally and in the cloud and permanently deleting data.	ZB1_U05 ZB1_U10
Social competences	K01	The student is aware of environmental protection measures in terms of energy management and conservation and of the impact of information technology on the environment.	ZB1_K05
	K02	The student knows the rules of netiquette and correct behaviour when using social networks and group work online.	ZB1_K03

COURSE CONTENT

Method of conducting classes	Course content
lecture	Security: threats to data, value of information, personal security, file security. Malware: types of malware and methods of malware, malware protection, malware troubleshooting and methods of malware removal. Network security and network connections, wireless networks. Access control: methods of access control, password management. Security in the use of web technology: web browser settings, security-free browsing of web resources, Communication: use of e-mail (including encryption), social networking, VoIP technology, instant messaging, tele- and video-conferencing, mobile devices. Secure data management: data security and archiving, secure deletion and destruction of data. Environmental protection: energy saving, awareness of the environmental impact of computing technologies. The programme content is in line with the international ECDL - IT Security certificate. At the end of the training the student is prepared to obtain the above mentioned certificate.

METHODS FOR VERIFYING LEARNING OUTCOMES

Outcome code	Learning outcomes verification methods					
	Oral examination	Written examination	Test	Project	Report	Other
W01			X			
W02			X			
W03			X			
W04			X			
U01			X			
U02			X			
U03			X			
U04			X			
K01						X
K02						X

FORM AND CONDITIONS OF ASSESSMENT

Form of classes	Assessment type	Assessment Criteria
lecture	Credit with grade	Passing at least 50 % of the semester colloquium.

STUDENT WORKLOAD

ECTS Balance								
No.	Activity type	Student workload						Unit
		full-time						
		W	C	L	P	S		
1.	Scheduled contact hours	15						h
2.	Other (consultations, exams)	2						h
3.	**Total number of contact hours**	**17**						h
4.	**Number of ECTS credits for contact hours**	**0,7**						ECTS
5.	**Number of hours of independent student work**	**8**						h
6.	**Number of ECTS points that a student obtains through independent work**	**0,3**						ECTS
7.	**Workload related to practical classes**	**0**						h
8.	**Number of ECTS credit points which a student receives for practical classes**	**0,0**						ECTS
9.	**Total number of hours of a student's work**	**25**						
10.	**ECTS credits for the course** *1 1 ECTS credit =25 student learning hours*	**1**						ECTS

W - LECTURE   C – CLASSES   L – LABORATORY   P- PROJECT   S – SEMINAR

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READING LIST

1. Mazur D., Żarnowska – Mazur, A., (2014), *ECDL IT Security*, wyd. PWN, Warszawa.
2. Javidi, B. (Ed.). (2005). *Optical and digital techniques for information security* (Vol. 1). Springer Science & Business Media.
3. Caputo, A. C. (2014). *Digital video surveillance and security*. Butterworth-Heinemann