

FACULTY OF ELECTRICAL
ENGINEERING**SUBJECT CARD**

Name in Polish: **Technologie informacyjne**
 Name in English: **Computer technology**
 Main field of study (if applicable): **Electrical Engineering**
 Specialization (if applicable):
 Level and form of studies: **1st level, part-time**
 Kind of subject: **obligatory**
 Subject code: **INR052561**
 Group of courses: **NO**

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU):	10		10		
Number of hours of total student workload (CNPS):	30		30		
Form of crediting:	crediting with grade		crediting with grade		
For group of courses mark (X) final course:					
Number of ECTS points:	1		1		
including number of ECTS points for practical (P) classes :			1		
including number of ECTS points for direct teacher-student contact (BK) classes:	0.70		0.70		

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Knowledge of basic problems of computer technics.
2. Abilities of basic handling computer.

SUBJECT OBJECTIVES

- C1. Deepening knowledge of basic computer hardware and software, especially the WINDOWS software.
 C2. Deepening practical skills in handling basic computer hardware and software, especially the WINDOWS software.

SUBJECT LEARNING OUTCOMES*relating to knowledge:*

- PEU_W01 The student has knowledge in the scope of basic computer hardware.
 PEU_W02 The student knows basic computer software, especially the WINDOWS software.
 PEU_W03 The student has knowledge in the scope of utilization of computer systems in computer networks.

relating to skills:

- PEU_U01 The student is able to effectively use I/O devices.
 PEU_U02 The student is able to effectively manage information and data in the Windows environment on a basic level.
 PEU_U03 The student is able to effectively utilize Internet.

relating to social competences:

- PEU_K01 The student has good habits in handling computer to ensure high its quality.

PROGRAMME CONTENT

Form of classes - lecture			Number of hours:
Lec 1	An introduction, the lecture program, requirements. Basic terms of computer science: hardware, software, information technology. Types of computers. Basic parts of PC. Computer performance.		2
Lec 2	Computer hardware: processor, computer memory, input/output devices, mass memory.		2
Lec 3	Computer networks: LAN i WAN, Intranet, Extranet, Internet. Utilisation of computers: computer in business, services in computer networks (e-Mail, e-commerce). Information security: basic terms, secure computer system.		2
Lec 4	Information security management: reasons of errors of computer protection, basic strategies to combat security threats.		2
Lec 5	Problems of safety, health and the environment when working with a computer: ergonomics, health care, precautions, computers and natural environment Some of the legal issues: author law, Polish law dealing the protection of personal data. Final test.		2
Total hours:			10

Form of classes - laboratory		Number of hours:
Lab 1	Principles of utilisation of PC: creating a work environment, a desktop environment, managing files, antiviral protection, printing.	1
Lab 2	Text processing: general principles of use of application, basic operations of text formatting.	2
Lab 3	Spreadsheets: general principles of use of application, creating documents including calculations and text, addressing, the concepts of a worksheet and spreadsheet, formatting cells and worksheets, formulas, functions.	2
Lab 4	Database: general principles of use of application, tables, forms, retrieving information from database, reports, printing.	2
Lab 5	Presentation and manager graphics: general principles of use of application; creating presentation including text, pictures, charts and diagrams.	2
Lab 6	Services in computer networks: utilization of Internet (e-Mail, WWW browsers, search engine tools).	1
Total hours:		10

TEACHING TOOLS USED
N1. Multimedia presentation. N2. Information lecture. N3. Preparation in the form of reports. N4. Computer editor. N5. Spreadsheets. N6. Program for creation and management of database. N7. Program for preparing presentations. N8. Program for providing services in computer networks.

EVALUATION OF SUBJECT LEARNING OUTCOMES ACHIEVEMENT		
Evaluation <i>F – forming (during semester) P – concluding (at semester end)</i>	Educational effect number	Way of evaluating educational effect achievement
F1(w)	PEU_W01 PEU_W02 PEU_W03	activity at the classes
F2(w)	PEU_W01 PEU_W02 PEU_W03	average of the grades from tests
P(w)	P=0.1 F1 + 0.9 F2	
F1(L)	PEU_U01 PEU_U02 PEU_U03	activity at the classes
F2(L)	PEU_U01 PEU_U02 PEU_U03	reports from the classes
P(L)	P=0.3 F1 + 0.7 F2	

PRIMARY AND SECONDARY LITERATURE
PRIMARY LITERATURE: [1] Anderson A., Benedetti R., Sieci komputerowe. Helion, Gliwice 2012. [2] Kawa R., Lembas J., Wstęp do informatyki. PWN, Warszawa, 2018 [3] Pikoń K., ABC internetu, Wyd. VII, Helion, Gliwice 2017. [4] Rzędowska A., Rzędowski J., Mistrzowskie prezentacje. Slajdowy poradnik mówcy doskonałego. Wyd. II, Onepress, Warszawa 2017. [5] Wróblewski P., ABC komputera, Wyd. XI, Helion, Gliwice 2017.
SECONDARY LITERATURE: [1] Alexander M., Microsoft Access. Przewodnik dla użytkowników Excela, Helion, Gliwice 2011. [2] Janus R., Komputer i Internet dla początkujących. Warszawa, Wiedza i Praktyka, 2018. [3] Jelen B., Alexander M., Microsoft Excel 2019. Przetwarzanie danych za pomocą tabel przestawnych, Promis, Warszawa 2019. [4] Walkenbach J., Alexander M., Analiza i prezentacja danych w Microsoft Excel. Vademecum Walkenbacha. Wyd.II, Helion, Gliwice 2014. [5] Wołk K., Microsoft Office 2019 oraz 365 od podstaw, Psychoskok, Konin 2019. [6] Wrotek W., ABC Excel 2019 PL, Helion, Gliwice 2019.

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