

FACULTY OF ELECTRICAL
ENGINEERING**SUBJECT CARD**

Name in Polish: **Bazy danych**
 Name in English: **Databases**
 Main field of study (if applicable): **Electrical Engineering**
 Specialization (if applicable):
 Level and form of studies: **1st level, part-time**
 Kind of subject: **optional**
 Subject code: **ELR051365**
 Group of courses: **NO**

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU):			10		
Number of hours of total student workload (CNPS):			60		
Form of crediting:			crediting with grade		
For group of courses mark (X) final course:					
Number of ECTS points:			2		
including number of ECTS points for practical (P) classes :			2		
including number of ECTS points for direct teacher-student contact (BK) classes:			1.40		

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. has basic computer literacy
2. has basic knowledge about searching for technical information
3. is able to write computer programmes based on given algorithm

SUBJECT OBJECTIVES

- C1. introduction to design data bases of data-centric systems
 C2. introduction to technological aspect of using modern data-centric systems
 C3. acquisition of decision-making skills in respect of designing databases

SUBJECT LEARNING OUTCOMES*relating to knowledge:**relating to skills:*

PEU_U01 is able to source information about designing relational databases from literature and other sources

PEU_U02 is able to design and program a database in MS ACCESS

relating to social competences:

PEU_K01 is able to think and action in a creative and enterprising manner

PROGRAMME CONTENT

Form of classes - laboratory			Number of hours:
Lab 1	Stage 0 -choice of subject actual database and the identification of the entity to determine the relationship and the initial data flow		2
Lab 2	Stage 1 - identification of attributes for all entities established system and to determine the types of data		2
Lab 3	Stage 2 - establish relationships explicit and unambiguous and one-reduction many-to-many. Programming SQL queries		2
Lab 4	Stage 3 - interface user base - creating forms. Data entry		2
Lab 5	Stage 4 - Creating the sample reports and summaries		1
Lab 6	Laboratory assessment		1
Total hours:			10

TEACHING TOOLS USED

- N1. students code case-based programmes both individually and in teams
N2. remote self-education - <http://eportal.eny.pwr.edu.pl>
N3. consultation

EVALUATION OF SUBJECT LEARNING OUTCOMES ACHIEVEMENT

Evaluation <i>F - forming (during semester)</i> <i>P - concluding (at semester end)</i>	Educational effect number	Way of evaluating educational effect achievement
F1(L)	PEU_U01 PEU_U02 PEU_K01	Development of a relational database in electronic form. E-learning platform: http://eportal.eny.pwr.edu.pl
P(L)	P=F1	

PRIMARY AND SECONDARY LITERATURE**PRIMARY LITERATURE:**

- [1] Bazy danych, W. Harris, WNT (any edition)
- [2] Wprowadzenie do systemów baz danych, C.J. Date, WNT (any edition)
- [3] E-learning platform: <http://eportal.eny.pwr.edu.pl>
- [4] Net-literature

SECONDARY LITERATURE:

- [1] SQL Język relacyjnych baz danych, Wellesley Software, WNT (any edition)
- [2] Programowanie w PHP, Helion, (any edition)
- [3] JAVA Kompendium programisty, Helion, (any edition)

SUBJECT SUPERVISOR

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