



The Faculty of:	Electrical and Computer Engineering
Field of study:	Computer Science
Speciality:	EA
Study degree (BSc, MSc):	BSc

COURSE UNIT DESCRIPTION

Course title:	Data base development
Lecturer responsible for course: Grzegorz Dec, PhD	
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Department : Computer Science and Automatic Control	

Semester	Weekly load	Type of classes				Number of ECTS credits
		L Lectures	C Theoretical Classes	Lb Laboratory	P Project	
8	3	10		5	5	4

Course description
<p>Lecture:</p> <ol style="list-style-type: none"> 1. The SQL language – data types. Objects of a relational data base. 2. Conversion of an ERD to a relational data base schema. 3. The PL/SQL language. Stored function and procedures. 4. SQL queries. 5. Business application architecture. Design patterns for business applications.
<p>Classes:</p>
<p>Laboratory:</p> <ol style="list-style-type: none"> 1. Enterprise Manager as a administration tool for the Oracle data base. 2. Design of a relational database schema in the SQL. 3. SQL queries.
<p>Project:</p> <ol style="list-style-type: none"> 1. Design of models of an information system. 2. Transforming models to the logical layer. 3. Implementation of the data model in the SQL language, 4. Implementation of the process model in the SQL language, 5. A prototype of the GUI.

Objectives of the course
Queries in the SQL language. Transformation of the ERD into the SQL. Transformation of the process models into the GUI forms and stored functions.
Examination method
Project: design and implementation of a DBS. Lecture: a written exam

Bibliography
1. Świder K., Dec G., Trybus B.: Inżynieria systemów informatycznych. Podstawy i praktyka budowy systemów oprogramowania, Oficyna Wydawn. PRz, Rzeszów 2004. 2. Heikki M., Kari-Jouko R. "The design of relational databases" Wokingham, England: Addison-Wesley Publ. Comp., 1992 3. Praca zbiorowa, (Wellesley Software): "SQL - Język relacyjnych baz danych", WNT, Warszawa 1995. 4. Ullman Jeffrey D.: "Systemy baz danych", WNT, Warszawa 1988.

Lecturer signature	
Head of Department signature	
Dean signature	