

COURSE TITLE: INTRODUCTION TO DATABASE SYSTEMS

Institute/Division: Institute of Electrotechnics and Computer Science / Faculty of Electrical and Computer Engineering

Course code: ...

Erasmus subject code: 061

Number of contact hours: 45

Course duration: 1 semester

ECTS credits:

Course description: The theoretical and physical aspects of a relational databases. Describe Oracle server's implementation of RDBMS and object relational database management system (ORDBMS). Identify the major components of Oracle Database. Retrieve row and column data from tables with the SELECT statement. Create reports of sorted and restricted data. Employ SQL functions to generate and retrieve customized data. Complex queries to retrieve data from multiple tables. Using Subqueries to Solve Queries. Using the Set Operators. Run data manipulation language (DML) statements to update data in Oracle Database. Data definition language (DDL) statements to create and manage tables. Creating other schema objects. Oracle SQL Developer – a graphical tool that enhances productivity and simplifies database development tasks. Control database access to specific objects. Users with different levels of access privileges. Manage objects with data dictionary views.

Course type: lectures (20h), laboratory (20h), project (5h)

Prerequisites and additional requirements: -

Description of learning outcomes for module:

Social competence: A student is able to work in a team.

Skills: A student is able to design and implement a relational database. A student is able to formulate queries in SQL language.

Knowledge: A student understands the basic issues of relational database systems, has basic knowledge of the design of relational databases as well as has the knowledge how to use SQL language.

Assessment method: Laboratory exercises and project.

Lecturers: Krzysztof Czajkowski, M.Sc. eng.

Contact person: kc@pk.edu.pl

Literature:

1. "Oracle Database 11g SQL", Jason Price, 2013, US.
2. "Oracle SQL By Example", Alice Rischert, 2009, US.
3. "SQL Pocket Guide", Jonathan Gennick, 2010, US.