

Course title: Advanced database systems

ECTS credit allocation (and other scores): 3

Semester: spring

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Engineering and technology

Language: English/Polish

Number of hours per semester: 45

Course coordinator/ Department and e-mail: Pawel Drozda, pdrozda@matman.uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: Installation and configuration of Oracle DBMS, Creating anonymous blocks in PL / SQL, Creating cursors, complex data types, adding exception handling, Creating procedures, functions in PL / SQL, Creating packages and triggers in PL / SQL, Basic administrative tools in Enterprise Manager, Creation of object-oriented elements and their handling in Oracle

LECTURES: Introductory information: databases, SQL, Introduction to PL / SQL, Cursors, handling exceptions in PL / SQL, Procedures, functions in PL / SQL, Packages, triggers in PL / SQL, Object-relational databases, Oracle DBMS administration

Learning purpose: The main aim of the course is to learn about database programming with elements of structural languages using the PL / SQL language

On completion of the study programme the graduate will gain:

Knowledge: The student knows how to describe the process of creating program elements in PL / SQL and knows the tools used for Oracle database administration

Skills: The student knows how to create program elements in PL / SQL (procedures, functions, triggers, packages) and knows how to use in practice the available Oracle server administration tools

Social Competencies: The student knows how to formulate questions regarding the tasks and is able to find the necessary information in literature and the Internet and is able to work in a group when creating a project

Basic literature: Oracle Documentation, PL/SQL Documentation

Supplementary literature: none

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 50

Student's independent work: 25