# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name Information Technologies - Advanced Level

#### Course

Field of study	Year/Semester
Pharmaceutical Engineering	1/2
Area of study (specialization)	Profile of study
-	general academic
Level of study	Course offered in
First-cycle studies	polish
Form of study	Requirements
full-time	elective

## Number of hours

Lecture	Laboratory classes	Other (e.g. online)
0	0	0
Tutorials	Projects/seminars	
0	15	

#### Number of credit points

1

## Lecturers

Responsible for the course/lecturer: dr inż. Maciej Staszak Responsible for the course/lecturer:

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## Prerequisites

Basic knowledge about the functioning of computers and their importance in human society.

## **Course objective**

To acquaint students with the specifics of computer functioning in a database environment. To indicate the width of applications of database systems in human activity.

#### **Course-related learning outcomes**

Knowledge



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The effect of teaching this subject is to know the advantages and limitations of using computer databases. (K\_W6)

## Skills

The student is able to connect to the local database and a remote database. The student is able to use the security of access to databases. The student is able to use databases to create database requests in the form of queries, is able to create databases, modify them, place data in them and find data in them. Students are able to use logical expressions to formulate queries. (K\_U19)

#### Social competences

The student understands the impact of using databases on improving the quality of work by finding and organizing information quickly. (K\_K3)

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows: Proejkt: Ongoing check of the material on colloquia.

## **Programme content**

MSAccess: access to a database located in a local file, access to a database located on a server, create a database, search and organize information. Building simple queries and complex queries using basic SQL syntax. Using conditional expressions, searching with wildcard expressions. Protecting databases against unauthorized access.

## **Teaching methods**

Project: Presentation of the functioning of applied tools, current exercises performed by students in computer labs.

#### **Bibliography**

#### Basic

Access 2013 PL. Kurs, Danuta Mendrala, Marcin Szeliga, Helion, 2013

#### Additional

Praktyczny kurs SQL. Wydanie III, Danuta Mendrala, Marcin Szeliga, Helion, 2015

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	30	1,0
Classes requiring direct contact with the teacher	20	0,7
Student's own work (literature studies, preparation for classes,	10	0,3
preparation for tests, project preparation) $^{1}$		

<sup>&</sup>lt;sup>1</sup> delete or add other activities as appropriate