



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Information technologies - advanced level

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### Course

Field of study

Pharmaceutical Engineering

Area of study (specialization)

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Level of study

First-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

polish

Requirements

elective

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### Number of hours

Lecture

0

Tutorials

0

Laboratory classes

0

Projects/seminars

15

Other (e.g. online)

0

### Number of credit points

1

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### Lecturers

Responsible for the course/lecturer:

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Wydział Technologii Chemicznej

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tel. 61 647 5980

Responsible for the course/lecturer:

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Faculty of Chemical Technology

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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

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:

Ongoing check of the degree of mastery of the material on colloquia. In the case of stationary classes, colloquia are given in a computer laboratory, while in the case of online classes colloquia are given using the university's network and computer infrastructure (VPN) via the Remote Desktop Protocol (RDP) using a remote desktop connection tool.

## 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	25	1,0
Classes requiring direct contact with the teacher	16	0,5
Student's own work (literature studies, preparation for classes, preparation for tests) <sup>1</sup>	9	0,5

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