

## **„MS Access – advanced training”**

### ***Course description:***

Access training – advanced operations is addressed to people who want to deepen their knowledge of databases and MS Access environment. The participants should have basic knowledge of databases and MS Access.

### ***Skills acquired during the training:***

- Advanced database creation techniques
- Creating advanced reports
- Creating advanced queries
- The basics of SQL language
- Working on different data sources (data export and import)
- Working and creating relational databases
- Database administration
- The basics of Visual Basic language

### ***Training program:***

#### **1. The basics of relational database theory**

- Relationship concept – overview of types of relationships,
- Table, row, column,
- Keys, foreign keys, and links between tables,
- Data types, type selection,
- Anomalies and normal forms.

#### **2. Queries - advanced operations**

- Crosstab,
- Updated,
- Creating tables,
- Adding records,

- Deleting records,
- Creating queries by using SQL language,
- Simple queries - SELECT construction ,
- Selecting a row - WHERE clause,
- Data ordering - ORDER BY clause,
- LIMIT, OFFSET clauses,
- Multiple theory operations,
- Merge multiple tables.

### **3. Forms - advanced operations**

- Form design,
- Properties and use of controls,
- Subforms.

### **4. Reporting - advanced operations**

- The design of report,
- Grouping data,
- Graphs.

### **5. Adding and modifying data using SQL language**

- Adding data – INSERT,
- Modifying data – UPDATE,
- Deleting data – DELETE.

### **6. Database design using examples**

- Database design process,
- Database schema notation,
- Design patterns.

### **7. Data import and export**

- Working with text files and MS Excel files.

### **8. Database administration**

- Users, groups, permissions,
- Defining your own menu,
- Compacting and repairing databases,
- Installing.

### **9. Macros and events**

- Events and their usage,
- Macros,
- Introducing and the simplest VBA procedures.

#### ***Methodology:***

- PowerPoint mini lectures

- working on computers (each participant works on a separate computer)
- mini training videos

***Organizational information:***

Number of training hours: 14 hours / 2 days

Time of training 9:15-16:15

Place of training: Łódź, Piotrkowska 125 – KM Studio - trainings