

## Microsoft Access – Advanced VBA programming

**Description:** The goal of the course is to familiarise participants with the possibilities of using VB language in Microsoft Access. It teaches how to use Microsoft Access object model, programming features and methods.

**Duration:** 16 hours

**Initial requirements:** The participants of the training should be well accustomed with the Microsoft Access program and know the syntax of the Visual Basic language. The training is based on fundamental information included in the first part of the training or an analogical knowledge level.

**For whom:** The training is dedicated for all those who wish to automate work and build database applications in the Microsoft Access environment, in particular those of public scope. The training is especially dedicated for those managing teams of employees collecting and processing big data collections.

### Module: Programming Microsoft Access objects (VBAAC04)

- 1) **Forms software**
  - a. Calendar controls, use and software
  - b. Mechanisms controlling correctness of the entered data
- 2) **Familiarisation with hierarchy of Access objects (features, methods, events)**
  - c. Familiarisation of object collection

### Module: Building own tools in database (VBAAC05)

- 1) **SQL - basics**
- 2) **Dynamic SQL expression to filter by a formula**
- 3) **Dynamic SQL expression as a source of chart data**
- 4) **Adding to drop-down lists**

### Module: Data manipulation (VBAAC06)

- 1) **Database manipulation using ADO**
  - a. Creating tables and setting field features
  - b. Launching queries
    - i) Queries with parameters (collecting values)
  - c. Opening and closing various types of Recordset objects
  - d. Work with records.
  - e. Filtering
  - f. Changing field values
  - g. Creating Recordset object based on a formula

---

**2) Manipulating databases using DAO**

- a. Creating tables and setting field features
- b. Creating and launching queries
  - i) Queries with parameters (collecting values from the formula)
- c. Opening and closing various types of Recordset objects
- d. Work with records
- e. Filtering
- f. Changing field values
- g. Creating Recordset object based on a formula

**3) Handling transactions**