

Course code: **R/ANA**

Course title: **Introduction to data analysis in R**

Days: 1

Description:

Course intended for:

Any person, who has not encountered the R environment and would like to start working in it. In particular, the training is dedicated for data analysts, who are no longer satisfied with the tools they use, and all those, who would like to get familiar with the basics of R environment.

Course objective:

The training objectives include:

- Introducing the user to R environment and tools necessary to work in it,
- Getting familiar with basic operations,
- Basic issues associated with quantitative and qualitative data analysis,
- Data visualization.

Requirements:

None.

Course parameters:

1*8 hours (1*7 net hours) of lectures and workshops (with a visible emphasis on workshops - 70%).

Group size: no more than 8-10 participants.

Course curriculum:

1. Introduction to R environment



- Installation and configuration of R and RStudio
- Basic work organization
- How to use help

2. Operations on vectors, vectorized operations

- Creation of vectors
- Arithmetic operations on vectors (adding, subtracting, multiplying, dividing)
- Totaling, determination of minimum and maximum values for entire vectors
- Vector search

3. Data frames and associated operations

- Calculation of basic statistics
- Data cleaning

4. Basic data analysis

5. Graphics /data visualization/

- histogram
- box chart
- distribution chart

