# **Topic**





**Continuing Education** 

R is a software environment for statistical analysis that enables users to conduct both simple and complex data analyses reproducibly and transparently.

In addition to the most common statistical analysis methods and graphics, which are also available in commercial packages such as SPSS, R provides a wide range of more specialized methods in the form of add-on packages.

Unlike commercial products, R is a free and open-source software that is continuously being improved and extended by a large circle of international statistics experts.

R is based on a flexible programming environment, and thus also allows users to implement their own functions and to conduct simulation studies.

In many universities R is being used with great success in both research and teaching, and more and more companies and public agencies are discovering the potential of R for their data handling and analyses.

The Zurich R Courses offer a platform for established and experienced lecturers of UZH and ETH as well as invited experts, who teach the application of R and its statistical background in a way that is understandable and directly applicable in practice.

In the Zurich R Courses, a series of both introductory and advanced courses on statistical data analysis with R are offered on a regular basis.

# **Zurich R Courses**

Introductory and advanced courses on statistical data analysis with the open-source software R

Continuing education courses of the University of Zurich and ETH Zurich

# **Program Overview**

## **Target audience**

All of our courses are aimed at a broad public, with participants from various academic, governmental, and professional fields. We offer introductory courses for beginners as well as more specialized courses for advanced users.

#### Program directors/Governance

- Prof. Dr. Carolin Strobl, Chair of Psychological Methods, Evaluation and Statistics, University of Zurich
- Prof. Dr. Torsten Hothorn, Epidemiology, Biostatistics and Prevention Institute, University of Zurich
- Dr. Markus Kalisch, Seminar for Statistics, ETH Zurich
- Dr. Lukas Meier, Seminar for Statistics, ETH Zurich
- Dr. Martin Mächler, Seminar for Statistics, ETH Zurich

#### Lecturers

Our local and guest lecturers are internationally established experts with many years of experience in applying and teaching R. Many of them are authors of R packages and actively involved in the continuous advancement of R.

#### Language

Depending on the participants, courses will be held in German or English.

#### Certificate

Certificate of attendance

#### Venue

Center for Continuing Education of the University of Zurich, Schaffhauserstr. 228, 8057 Zurich (www.zwb.uzh.ch)

#### Costs

For example for a two-day course:

- CHF 600.- for members of UZH/ETH and associated institutes
- CHF 800.– for alumni of UZH/ETH, members of other universities, the public sector and non-profit organizations
- CHF 1200.- for companies

Reduced prices for groups are available upon request.

#### Registration and further information

www.zhRcourses.uzh.ch

## Courses offered

# Current program available at www.zhRcourses.uzh.ch

#### Introduction to R

Courses of this category are aimed at R beginners who have basic knowledge in statistics. They provide an introduction to the application of R in an understandable and practically oriented manner.

## Statistical data analysis with R

Courses of this category are aimed at users who have basic knowledge in statistics and have used R before. They cover a general introduction as well as the practical application of particular statistical methods in R, e.g.:

- Data processing and visualization with R
- Mixed (hierarchical) models with R
- Structural equation models with R
- Bayesian statistics with R

## **Programming with R**

Courses of this category are aimed at advanced R users and provide special knowledge, ranging from basic programming commands to expert knowledge for building your own R packages.

#### In-house courses

Many courses can also be offered in-house at your location. For individual offers, contact us at: www.zhRcourses.uzh.ch