



Training

Expand your skillset with engaging teachers
and courses

Our offer

- > Focus on **key competences** for business and career development.
- > Customised courses for both **individuals** and **companies**.
- > **Professional** trainers with years of practical experience.
- > Material suited to **different audiences**.

Public Courses

Based on current state of the art, we organize on-demand public courses for various technologies.

Private Courses

We deliver tailored courses by customizing content and use cases to your needs.

Introduction to R Language

Course description

Learn the fundamentals of the R language and obtain a solid basis for further applied R education.

We teach how to process and visualize data, while becoming familiar with the popular interface "RStudio".

PREREQUISITE

None

RECOMMENDED

Basic knowledge of programming

TECHNOLOGY
R

LEVEL
BEGINNER

DURATION
2 DAYS

- > Work with RStudio IDE
- > CRAN packages & online resources
- > Understand R data structures
- > Use functions & operators
- > Import & manipulate data with base R
- > Learn R graphics

Introduction to Data Analytics with R

Course description

Acquire the fundamental tools to read, manipulate, clean, analyze and visualize datasets.

This course teaches the intuitive and easy-to-learn syntax of the „tidyverse“ framework, popular among data scientists.

PREREQUISITE

None

RECOMMENDED

No programming experience required

TECHNOLOGY
R

LEVEL
BEGINNER

DURATION
1 DAY

- > Work with RStudio IDE
- > Overview of tidyverse packages
- > Import & manipulate data with tidyverse
- > Introduction to data analysis
- > Categorize data and explore them by group
- > Introduction to graphics with ggplot2

R for Data Scientists

Course description

Deep-dive into elegant data manipulation approaches, statistical analysis and visualization.

See examples of functional coding-style and learn how to generate both interactive and hard-copy (pdf) reports using markdown.

PREREQUISITE

Introduction to data analytics with R

RECOMMENDED

Introduction to R language

TECHNOLOGY
R

LEVEL
INTERMEDIATE

DURATION
1 DAY

- > Learn with a case study
- > Advanced data manipulation & analysis with tidyverse
- > Advanced graphics with ggplot2
- > Statistical models in R
- > Create a report with rmarkdown and basic shiny

Programming in R

Course description

Learn about tools and the best practices that can help you organize, share and maintain your R code.

We will practice writing functions, see how to debug them and create an R package - including documentation and unit tests.

PREREQUISITE

Introduction to R language

RECOMMENDED

Introduction to data analytics with R

TECHNOLOGY
R

LEVEL
INTERMEDIATE

DURATION
2 DAYS

- > Master functions
- > Debugging tools and tricks
- > Get coding best practices from experts
- > Create packages & manage dependencies
- > Document code using roxygen2
- > Introduction to testing with devtools and testthat

Introduction to R-Shiny

Course description

Create rich, interactive web-apps and dashboards with the popular framework R Shiny.

Develop directly from R, without knowing any web technologies, and make your work accessible also to users unfamiliar with R.

PREREQUISITE

Introduction to data analytics with R

RECOMMENDED

Introduction to R language; R for data scientists

TECHNOLOGY
R

LEVEL
BEGINNER

DURATION
1 DAY

- > Customize your user interface
- > Dynamic and interactive plots
- > User interaction and reactivity
- > Case study

Customize your Course

Tell us your interests and goals and we will develop a course outline according to your needs.

It can include review and advice on code you have written, addressing concrete problems together, or making use of your own data and use cases.

TECHNOLOGY
ANY

LEVEL
ANY

DURATION
ANY

CONTACT US

We look forward to hearing from you!

> training@mirai-solutions.com

Introduction to SQL

Course description

Learn the fundamentals of relational databases and the SQL language.

The participants will practice everyday data manipulation tasks, by querying, filtering, grouping, transforming and combining data stored in database tables.

PREREQUISITE

None

RECOMMENDED

Basic knowledge of programming

TECHNOLOGY
SQL

LEVEL
BEGINNER

DURATION
2 DAYS

- > Introduction to relational databases and SQL dialects
- > Write simple queries
- > Filter, group and order results
- > Use built-in functions
- > Combine information from multiple tables

Programming in SQL

Course description

Improve your programming skills by getting familiar with the essentials of relational database routines.

Gain hands-on experience writing your own database functions and stored procedures, and bring SQL to the next level.

PREREQUISITE

Introduction to SQL; Advanced queries in SQL

RECOMMENDED

Basic knowledge of programming

TECHNOLOGY
SQL

LEVEL
INTERMEDIATE

DURATION
1 DAY

- > Data modification and data definition
- > User-defined functions and stored procedures
- > Custom datatypes
- > Transaction management
- > Views and temporary tables

Advanced Queries in SQL

Course description

Learn how to write complex queries performing advanced data grouping and transformation.

Get familiar with analytic functions in database, and with the fundamentals for optimal design of complex queries.

PREREQUISITE

Introduction to SQL

RECOMMENDED

Basic knowledge of programming

TECHNOLOGY
SQL

LEVEL
INTERMEDIATE

DURATION
1 DAY

- > Elaborate grouping and selecting statements
- > Best practices for efficient complex queries
- > Reshape data, pivoting and unpivoting
- > Window functions and analytic functions

Who we are

Mirai Solutions

- > **Swiss**-based consulting company
- > **Interdisciplinary** and multi-national team
- > Extensive **specialist knowledge** (mathematics, statistics and economics) and **professional experience** in financial services, software engineering and IT architecture
- > Wide teaching expertise in courses, workshops and individual training engaging various audiences

Our Expertise

- > Data Analytics
- > Modeling
- > Software Development
- > Training

CONTACT US

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- > training@mirai-solutions.com

For the full range
of our courses and services
visit our website
or contact us directly.



Mirai Solutions GmbH

Tödistrasse 48

CH-8002 Zurich Switzerland

training@mirai-solutions.com

www.mirai-solutions.com