R language e-learning channel

Practical course - 1d - 06 - Ref. 8LR
Price : 190 CHF E.T.

Are you looking to make your data analyses more accurate and impactful? Discover our specialized channel on the R language, a powerful and accessible tool that will enable you to make the most of your data, whatever its size or complexity. You'll learn how to write programs in R, manipulate and manage data and use different packages in a data science context.

Teaching objectives

At the end of the training, the participant will be able to:

- Discover the R studio environment.
- Work with all types of data: CSV, Excel, SQL, NoSQL.
- Produce a graphic visualization: scatterplot, bar graph or word cloud.
- Manipulate data with the dplyr package.
- Perform data cleansing with the tidyr package.
- Write R programs.

Intended audience

Data scientists, computer scientists.

Prerequisites

Basic knowledge of programming and data manipulation.

PARTICIPANTS

Data scientists, computer scientists.

PREREQUISITES

Basic knowledge of programming and data manipulation.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

Practical details

Digital activities

IT structure: recorded courses, expert videos and best practice sharing.

Mentoring

L'option tutorat propose un accompagnement personnalisé par un formateur référent ORSYS, expert du domaine. Adapté aux besoins, aux capacités et au rythme de chaque apprenant, ce tutorat combine un suivi asynchrone (corrections personnalisées d'exercices, échanges illimités par message…) et des échanges synchrones individuels. Bénéfice : une meilleure compréhension, le développement des compétences et un engagement durable dans la formation.

Pedagogy and practice

A wealth of content produced by trainers following a rigorous pedagogical approach. During each course, operational cases are commented on by experts to help learners put into practice what they have just learned. To help learners anchor their memory, each content item is broken down into short sequences of 3 to 10 minutes. This enables each learner to learn dynamically and independently.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

Course schedule

1 R language, learn the fundamentals of R programming for data science

- Discover R.
- Know the basics of the R language.
- Using R and data.
- Analyze statistics and make your first graphs.
- Reporting results and discovering possibilities.

2 R language, accessing all its data types

- Consolidate your knowledge of R and its environment.
- Use data in CSV format.
- Use data in Excel format.
- Use data from an SQL database.
- Use data from an API.
- Use data from a MongoDB NoSQL database.

3 R language, manipulating data with the dplyr and tidyr packages

- Access different data formats with R.
- Handling with the dplyr package.
- Introduction to data cleansing with the tidyr package.