Big Data e-learning channel - Scala/Spark

Practical course - 1d - 04h46 - Ref. 8SL
Price : 190 CHF E.T.

NEW

In a world where data is ubiquitous, Big Data represents much more than just a technological trend. To manage these very large volumes of data, specific frameworks and languages are used together to leverage the possibilities offered by Big Data. This is particularly true of the Spark Framework and the Scala programming language. This specialized channel will teach you how to program using the Scala language and the Spark Framework.

Teaching objectives

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

- Know the history of big data.
- Understand the fundamental concepts of Big Data.
- Understand the uses of big data.
- Master Scala syntax and control structures.
- Manipulate native Scala collections.
- Understand the concepts of object-oriented programming with Scala.
- Manage large volumes of data with the Spark Framework.
- Using Spark to enrich data and perform Machine Learning.
- Use Spark in a data analysis and processing situation.

Intended audience

Anyone wishing to learn how to use the Scala language and Spark Framework in a Big Data context.

Prerequisites

Knowledge of Python and databases.

PARTICIPANTS

Anyone wishing to learn how to use the Scala language and Spark Framework in a Big Data context.

PREREQUISITES

Knowledge of Python and databases.

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

The tutoring option offers personalized support from an ORSYS trainer who is an expert in the field. Adapted to the needs, abilities and pace of each learner, this tutoring combines asynchronous follow-up (personalized corrections of exercises, unlimited exchanges by message...) and individual synchronous exchanges. The result: better understanding, skills development and lasting commitment to training.

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 Big data, understand its creation, its concepts and discover examples

- What is Big Data?
- Data, the black gold of the 21st century.
- Analysis, the wonderful world of Data Science.
- Exploiting data through innovative technologies.
- Big Data: use, abuses and risks.

2 Scala, getting to know the language

- The Scala language.
- Execution flows.
- Data structures.
- Functions.
- Object-oriented programming with Scala.

3 Spark, a distributed framework for Big Data and Machine Learning

- The Spark Framework and how it works.
- Spark for data enrichment.
- Spark for machine learning.