Big Data e-learning channel

Practical course - 1d - 05h10 - Ref. 8TA
Price : 190 CHF E.T.

In a world where data is ubiquitous, Big Data represents much more than just a technological trend. It's a revolution that's transforming the way companies operate, make decisions and interact with their customers. Our specialized channel will introduce you to the key concepts of Big Data, and teach you how to manipulate large volumes of data using a variety of methods and tools.

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.
- Define the notions of NoSQL and big data.
- Install Hadoop and study the various tools at the heart of the platform.
- Deploy a cluster on virtual machines in the cloud with the Cloudera Data Plateform distribution.
- Storing data in Hadoop.
- Understand the distributed data processing paradigm with MapReduce.
- Develop processing with Spark or SQL with Hive.
- Familiarity with the Apache Spark distributed framework.
- Install and get to grips with the Spark framework.
- Using Spark to enrich data and perform Machine Learning.
- Use Spark in a data analysis and processing situation.

Intended audience

Decision-makers and developers interested in big data.

Prerequisites

No special knowledge required.

PARTICIPANTS

Decision-makers and developers interested in big data.

PREREQUISITES

No special knowledge required.

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.

TERMS AND DEADLINES

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.

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: uses, abuses and risks.

2 Hadoop, storing and processing data for big data

- Introduction to the origins of Hadoop.
- Setting up a Hadoop environment with Cloudera.
- Data storage management.
- Data processing.

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

- Framework Spark and its inner workings.
- Spark for data enrichment.
- Spark for machine learning.