Python Data Science e-learning channel

Practical course - 1d - 04h53 - Ref. 8YD
Price : 190 CHF E.T.

Why is Python the language of choice for data scientists worldwide? Immerse yourself in the world of Data Science with our specialized Python channel, designed to provide you with the skills you need to manipulate and analyze data. You'll learn how to use the advanced features of the Python language, focusing on essential libraries such as Pandas and NumPy, to transform raw data into actionable insights.

Teaching objectives

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

- Get to know NumPy and Pandas, the libraries dedicated to data science.
- Prepare and virtualize data.
- Analyze variables.
- Estimate models with the Scikit-Learn library.
- Building a model based on NLP.
- Manage data vectorization and hyperparameter settings.
- Using Random Forest to build NLP-based classification models.

Intended audience

Python developers and anyone interested in data science.

Prerequisites

Solid knowledge of the Python language.

PARTICIPANTS

Python developers and anyone interested in data science.

PREREQUISITES

Solid knowledge of the Python language.

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 Using Python for data science

- Python and data science.
- Data visualization.
- Inferential statistics with Python.
- Multivariate modeling with Python.

2 Using Natural Language Processing (NLP) with Python

- Introduction to Natural Language Processing (NLP).
- Text data manipulation and preparation with Python.
- Data vectorization.
- NLP modeling with Random Forest.