Course : Designing and implementing a data science solution on Azure (Microsoft DP-100)

Official DP-100 course, exam preparation

Practical course - 4d - 28h00 - Ref. DSL
Price : 2730 € E.T.

With this training course, you'll learn how to use Azure Machine Learning to manage machine learning projects in the cloud. You'll learn how to import and prepare data, train and deploy models, and monitor their performance. This course builds on your basic knowledge of Python and machine learning.

Teaching objectives

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

- Using Azure Machine Learning to create and manage machine learning projects
- Preparing and loading data into Azure
- Training, evaluating and tuning machine learning models
- Deploying models in production in the cloud
- Monitor model performance with MLflow
- Automate ML tasks with pipelines in Azure Machine Learning

Intended audience

Data scientists proficient in Python and frameworks such as Scikit-Learn, PyTorch or TensorFlow, wishing to create and manage machine learning solutions in the cloud.

Prerequisites

Good command of Python (pandas, scikit-learn, PyTorch/TensorFlow), data science concepts and Azure ML services.

Practical details

Teaching methods

Training in French. Official course material in digital format and in English. Good understanding of written English.

PARTICIPANTS

Data scientists proficient in Python and frameworks such as Scikit-Learn, PyTorch or TensorFlow, wishing to create and manage machine learning solutions in the cloud.

PREREQUISITES

Good command of Python (pandas, scikit-learn, PyTorch/TensorFlow), data science concepts and Azure ML services.

TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

ASSESSMENT TERMS

Assessment of targeted skills prior to training.
Assessment by the participant, at the end of the training course, of the skills acquired during the training course.
Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.
At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.
An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

Course schedule

1 Explore and configure the Azure Machine Learning workspace

- Explore the resources and elements of the Azure Machine Learning workspace.
- Explore tools for interacting with the workspace.
- Make data available in Azure Machine Learning.
- Working with computational targets in Azure Machine Learning.
- Working with environments in Azure Machine Learning.

2 Experimenting with Azure Machine Learning

- Find the best classification model with automated machine learning (AutoML).
- Follow the training of models in notebooks with MLflow.

3 Optimize model training with Azure Machine Learning

- Run a training script as a command job in Azure Machine Learning
- Follow model training with MLflow in jobs
- Perform a hyperparameter search with a sweep job
- Running pipelines in Azure Machine Learning

4 Managing and examining models in Azure Machine Learning

- Register an MLflow model in Azure Machine Learning.
- Create and explore the Responsible AI dashboard for a model in Azure Machine Learning.

5 Deploying and consuming models with Azure Machine Learning

- Deploy a model on an online endpoint.
- Deploy a model on a batch endpoint.

Options

Certification : 200 € HT

Successful completion of the exam leads to certification as a "Microsoft Certified: Azure Data Scientist Associate".
Comment passer votre examen ?

The certification option comes in the form of a voucher or invitation that will allow you to take the exam at the end of the training course.

TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

TERMS AND DEADLINES

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

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: psh-accueil@orsys.fr so that we can assess your request and its feasibility.