Overview

Get ramped quickly on MongoDB with a comprehensive training program for data scientists and analysts. This 3-day course covers MongoDB fundamentals, data modeling, analytics with the aggregation framework, and integrations with BI tools and data processing frameworks.

MongoDB training courses are delivered on site at your company and taught by an experienced MongoDB consulting engineer. Throughout the course, hands-on exercises reinforce the subjects being discussed.

Who Should Attend?

This course is designed for data scientists, data analysts, data engineers, or anyone else who needs to interact with MongoDB technologies to derive business insights from data stored in MongoDB. No prior experience of MongoDB is required.

Course Duration

This is a 3-day training course.

Course Prerequisites

- This class can be delivered in person or remotely. For in-person classes, all students must attend the class in person.
- Each class accommodates up to 12 students.
- To fully participate in the class, students should be equipped with a computer that has:
  - unobstructed web access
  - access to the strigo.io training delivery platform via a supported web browser
  - for remote classes, the ability to join a Zoom meeting using the Zoom desktop client (ideally), or using the Zoom web client in a supported web browser
Course Content

**Day 1**

**Objectives and Tools**
- MongoDB Atlas
- MongoDB Compass
- MongoDB Python driver
- Apache Spark
- MongoDB Spark connector

**Dataset Introduction**
- Introduction to the dataset used throughout the course and how it is modelled with a document database schema

**Loading Data**
- Lab: MongoDB Atlas setup
- Lab: MongoDB Compass setup
- Lab: Loading and exploring data

**Cleaning and Shaping Data**
- MongoDB aggregation framework overview
- Cleaning data
- Shaping data

**MongoDB Document Model**
- JSON and BSON
- MongoDB Data Types

**CRUD for Analytics**
- Introduction to create, read, update and delete operations
- Bulk write API
- findAndModify

**Schema Design**
- Introduction to schema design in MongoDB
- Common design patterns
- Lab: Design data model for an e-commerce site

**Day 2**

**Data Analytics Workshop**
- Day-long hands-on labs using the MongoDB aggregation framework to accomplish data transformation and analysis goals
- Students use interactive Jupyter notebooks to transform and analyze data in MongoDB using Python and the MongoDB query language

**Day 3**

**Classifying and Analysing Data**
- Classifying and analysing data with MongoDB and Python analytics and machine learning libraries
- Lab: Create a machine learning model using MongoDB and Python

**BI Connector**
- MongoDB BI Connector and ODBC Driver
- Lab: Connecting Excel to an Atlas cluster

**MongoDB Charts**
- MongoDB Charts for Analytics
- Lab: Using MongoDB Charts for data exploration

**Change Streams**
- Introduction to change streams for real-time analytics
- Lab: Change streams

**MongoDB Spark Connector**
- What is Spark?
- Why use Spark with MongoDB?
- Getting started with the MongoDB Spark connector