# MongoDB for Data Analytics – on demand

MongoDB is today's fastest-growing database platform and the leading "NoSQL" database in the world. While MongoDB has long been the established standard for web and mobile application development, it is also increasingly being used in broader contexts such as genomics, real-time analytics and IoT.

Analyzing data in MongoDB presents unique challenges because of MongoDB's non-SQL interfaces and non-relational data models. However, MongoDB includes native analytical capabilities, and there are connectors available to familiar analytic tools.

In this course, you'll learn how to retrieve data from a MongoDB database into analytic tools, and how to use the MongoDB built in frameworks for data analysis

**Introduction (10 minutes)**

\* About the instructor

\* Scope of the course

\* Prerequisites

**Module 1: MongoDB recap (40 minutes)**

\* What is MongoDB

\* JSON documents in MongoDB

\* Challenges for data analysts and data scientists

\* Connecting using the shell

\* Find() commands

\* Introduction to the Aggregation framework

\* Using the Compass UI

\* Connecting from languages and tools: Python, R

\* Exercise1

**Module 2: The aggregation Framework (40 minutes)**

\* Manipulating documents: $match, $unwind, $project

\* Grouping and sorting

\* Joining collections

\* Creating aggregations in Compass

\* Exercise 2

**Module 3: Beyond Aggregation (40 minutes)**

\* The MongoDB BI Connector

\* BI connector example with Tableau

\* MongoDB Charts

**Module 4: Wrap up (10 minutes)**

\* Summary

\* Further resources