

# An introduction to data science – Lesson overview

The **world of data is vast and dynamic**, constantly changing as our access to information increases. Understanding the **fundamentals of data** enables us to craft insights, make informed decisions, and unlock transformative opportunities.

In this lesson, we'll embark on a journey to unravel the mysteries of **data, big data, data-driven exploration and analysis, data science**, and the diverse **roles in the world of data**. By the end of this lesson, you will know what data and big data are, how we approach data analysis and data science to derive meaningful insights, and understand the in-demand attributes, skills, and tools of data professionals.

## Learning objectives

- Understand what data are and how we can leverage it in decision-making.
- Understand what big data is, why it is important, and describe the characteristics of it.
- Know the data analysis and data science processes and how they differ.
- Know some of the fundamental data professional roles, responsibilities, attributes, skills, and tools.

 Slide deck

 Knowledge questions

 Video

 Reference card

