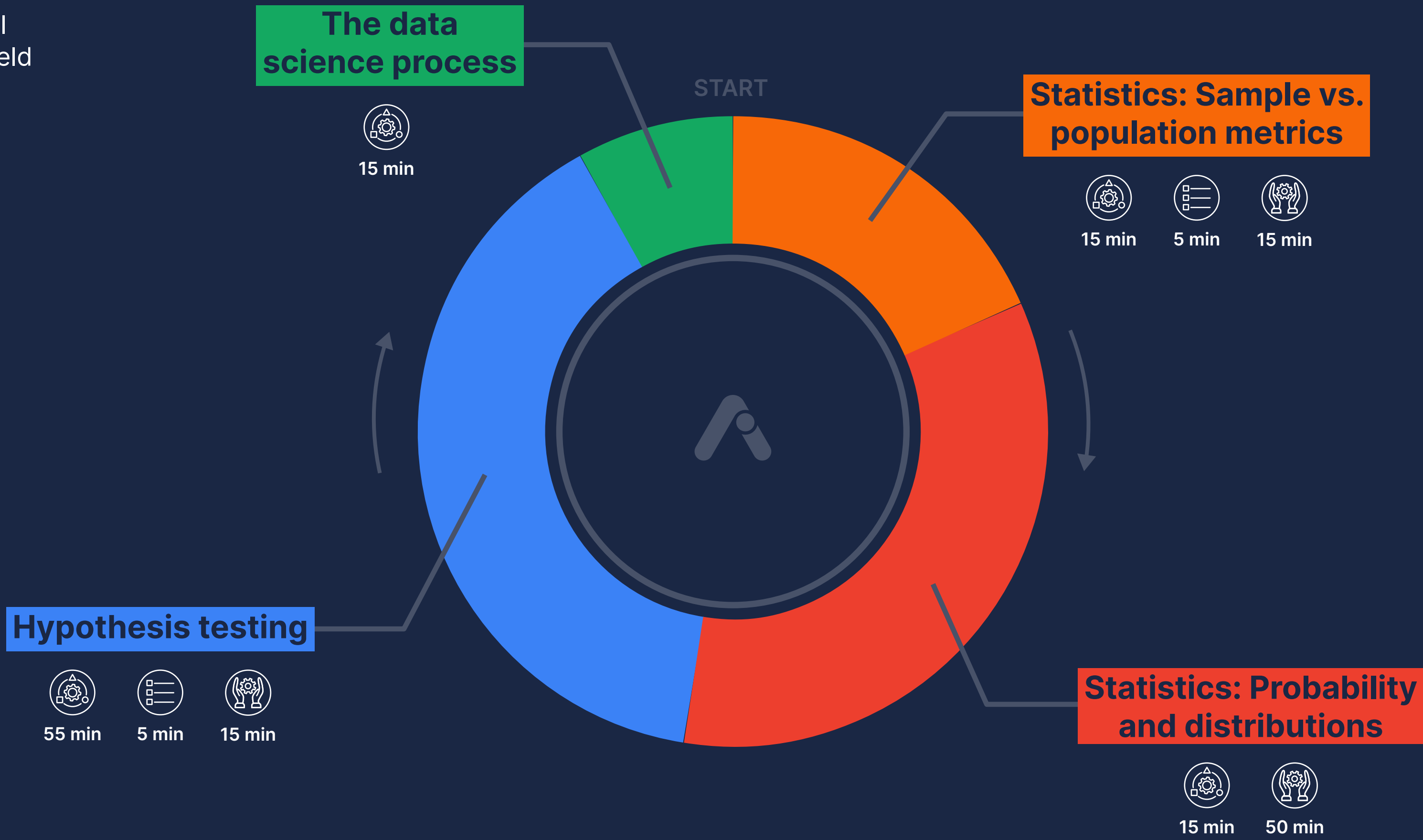# Statistics with Python - Lesson overview

Statistics is essential for **analysing** and **interpreting** data in projects, and Python's rich **libraries** make it a powerful tool for this purpose. This enables **improved analysis**, **teamwork**, and project **transparency**.

In this lesson, we'll learn how to use **Python for statistics**. We'll start by covering some **basic functionality** of Python for the field of statistics, before looking at the **data science process as a whole**, considering what we've learnt up to now.

Learning objectives

- Calculate sample and population metrics in Python.

- Use Python to do descriptive statistics, as well as calculate probabilities.

- Define and use hypothesis testing.

- Understand the concept of the data science process.

Examples

Knowledge questions

Exercise

The data science process

15 min

START

Statistics: Sample vs. population metrics

15 min   5 min   15 min

Statistics: Probability and distributions

15 min   50 min

Hypothesis testing

55 min   5 min   15 min