Python functions – Lesson overview

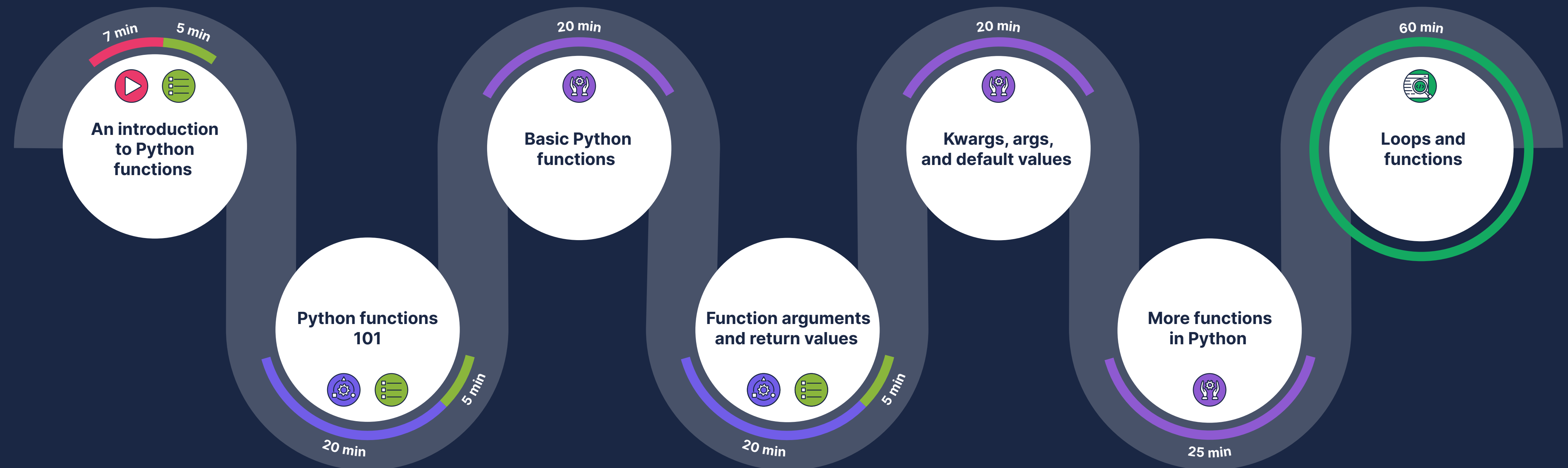Python functions are pivotal in enhancing code modularity and reusability. They allow developers to encapsulate specific functionality, making code more organised and efficient.

In this lesson, we'll delve into the **fundamental role of functions in Python programming**, exploring their diverse applications. Beyond mere understanding, we'll actively engage in **creating our own functions**, unveiling the versatile power they bring to the table. Through **practical examples** and **hands-on exercises**, we'll gain a comprehensive insight into the inner workings of Python functions, empowering us to write more maintainable and scalable code.

Legend:
- Video
- Knowledge questions
- Examples
- Exercise
- Code challenge

Lesson path

- **An introduction to Python functions** — 7 min (Video), 5 min (Knowledge questions)
- **Python functions 101** — 20 min, 5 min
- **Basic Python functions** — 20 min
- **Function arguments and return values** — 20 min, 5 min
- **Kwargs, args, and default values** — 20 min
- **More functions in Python** — 25 min
- **Loops and functions** — 60 min

Learning objectives

- Understand what functions are and their importance in programming.

- Learn how to define and call functions in Python.

- Understand the difference between parameters and arguments.

- Learn how to use return statements to return values from functions.