Data Analytics and Python Programming



Expect these Contents

The Short Course aims at educating students on data-driven learning with a special focus on supervised, unsupervised and reinforcement learning. Another important pilar of the program is Introduction to Programming, including algorithms, Python basic data types (int, string, bool), math operations, conditionals, and loops. The program commences by introducing the fundamentals of file handling with Python: JSON, txt and csv structured and unstructured data types. The second part handles artificial neural networks and other models.

- Explore programming and Python basic data types.
- Master object-oriented programming techniques.
- Understand data analytics and artificial neural networks.
- Visualize and explore data effectively.

Summer School

- July 28 August 10, 2025 (2 weeks)
- € 3,190 €

Generation On-campus

- **8** Supporting Program
- RWTH Certificate with 3 ECTS (approx. 75 hours)
- **Accommodation included**

Put your programming skills into practice

Apart from learning and mastering fundamental concepts of programming and data analysis, you will lay the foundation for your future career by putting the acquired methodology directly into practice. You can look forward to discovering cutting-edge applications of AI with the help of practical case studies and a visit to RWTH's own Smart Automation Lab.





