

# Data Analysis using Python

Sustainable Communication Networks  
University of Bremen

# Course Objective and Requirements

- Hands-on driven course
- Material online available (GitHub)
- Go through examples
- Questions? Ask!

You should now have

- A computer with you
- Internet access
- Python installed
- (A text editor installed)

Material on GitHub:

[github.com/ComNets-Bremen/Python-Class](https://github.com/ComNets-Bremen/Python-Class)

# Hello World in Python

```
1 #!/usr/bin/env python3
2
3 """
4 Hello World
5
6 Author, 2019, myaddress@uni-bremen.de
7 """
8
9 print("Hello World") # Basic "Hello World" example
```

Listing 1: “Hello World” in Python

# Indentation / Blocks in Python

```
1 #!/usr/bin/env python3
2
3 """
4 Indention example
5 """
6
7 myValue = True
8
9 if myValue:
10     print("myValue is True")
11 else:
12     print("myValue ist False")
```

Listing 2: Indention in Python

# Ideas to try out

- Hello world example
- Print a square / triangle
- Enter name and gender to formulate a greeting
- Print prime numbers
- Try out the random number generators
- Create a simple phone book
- Plot a sine / cosine using matplotlib
- Read the data from the files directory and plot statistics
- ...

