



Learning Journey

10% Week 1 SU1 - Introduction to Python Programming & Machine Learning

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-1.
- Complete Assignment Prac3-1.

Topics:

- Machine learning (ML)
- Difference between supervised and unsupervised learning
- Tools for Python and ML
- Introduction to Python programming
- Write sequential statements



20% Week 2 SU2 - Python Programming – Selection

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-2.
- Complete Assignment Prac3-2.

Topics:

- Introduction to Python's selection statements
- The *If-Else* statement
- Multi-way selection



30% Week 3 SU3 - Python Programming – Repetition

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-3.
- Complete Assignment Prac3-3.

Topics:

- Introduction to Python's repetition statements
- Indefinite iteration using a *while* statement
- Definite iteration using a *for* statement



40% Week 4 SU4 - Extending Python using Numpy

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-4.
- Complete Assignment Prac3-4.

Topics:

- Creating NumPy Arrays
- Indexing and reshaping of arrays
- Array math
- Array assignment



50% Week 5 SU5 - Manipulating Tabular data using Pandas

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-5.
- Complete Assignment Prac3-5.

Topics:

- What is Pandas?
- Pandas series
- Pandas dataframe



60% Week 6 SU6 - Getting started with SciKit-learn for Machine Learning

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-6.
- Complete Assignment Prac3-6.

Topics:

- Introduction to Scikit-learn
- Getting Datasets
- Data cleansing



70% Week 7 SU7 - Supervised Learning - Linear Regression

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-7.
- Complete Assignment Prac3-7.

Topics:

- Types of Linear Regression
- Linear Regression
- Polynomial Regression



80% Week 8 SU8 - Supervised Learning - Classification using Logistic Regression

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-8.
- Complete Assignment Prac3-8.

Topics:

- What is Logistic Regression?
- Using a Diagnostic Data Set



90% Week 9 SU9 - Unsupervised Learning - Clustering using K-Means

To do:

- Download additional study material.
- Read study material.
- Attend facilitation sessions.
- Complete Quiz3-9.
- Complete Assignment Prac3-9.

Topics:

- What Is Unsupervised Learning?
- Using K-Means to Solve Real-Life Problems



100% Final stage



- Complete the Capstone Project.
- Evaluate the course.
- Receive your certificate!

