

# Institute of Coding Skills Bootcamp

## Machine Learning

**Location:** Cardiff    **Cost:** Free

**Contact Hours:** One evening per week, 10 weeks

### Synopsis:

The Machine Learning free micro-credential will teach you how to develop machine learning models without requiring extensive coding knowledge, using low-code open-source Python libraries for data analysis and model development using automated machine learning.

By the end of the micro-credential, you will also be able to interpret and present machine learning model output using visualisations and other Explainable AI methods. You will also have learnt how to develop simple interactive dashboards and machine learning web applications using Streamlit.

### Notes:

Open to beginners, the course will show you how to set up your own development environment, as well as how to perform data analysis and feature creation. It will also give you an overview of various machine learning model types, such as Classification, Regression and Natural Language Processing topic modelling.

### Assessment:

A short, written assessment equating to around 2,000 words.

### Syllabus:

Machine Learning Model Development Fundamentals; Creating your own machine learning model development environment; Basic Python coding; Exploratory Data Analysis; Classification Model Development; Regression Model Development; Natural Language Processing, Topic Modelling; Model Interpretation and Explainable AI; Development of data science web applications with Streamlit