{code**nation**}®

Skills Bootcamp in Data Analysis
12 week - Part-Time

Overview of the course:

Our 12-week part-time Skills Bootcamp in Data Analysis is an immersive course focused on data analysis and the data analysis process. The course is 2 days a week, 9.30am to 17:30pm.

You will work through the five main steps of defining a problem statement, acquiring data, cleaning data, analysing data with descriptive statistics, and visualising data for reports. These steps provide an introduction to some of the most sought-after skills in data analysis, using tools like Python, SQL, Excel, and Power BI, while developing critical thinking and problem solving skills, and domain knowledge.

You will develop and build on your communication, problem solving, project collaboration, presentation, and leadership skills.

Throughout the course you will have the opportunity to hear from industry speakers and receive personalised coaching from experienced data, technology and change professionals.

Eligibility:

This Bootcamp is aimed at anyone wanting to gain or enhance their problem solving and analysis skills, designed to give you the skills needed to begin an entry level position in the data analysis sector.

- 19+
- Employed
- Unemployed
- Self employed

Funded by
UK Government

Details:

✓ **Part-time, remote course, 09:30am-17:30pm, running 2 days a week, over 12 weeks**

✓ **180 Hours of hands on Data Analysis experience**

✓ **Hear from Employer speakers during the course**

✓ **Funding available dependant on eligibility**

✓ **Guaranteed interview if you are unemployed with hiring employer upon completion**

What is covered?

Week One

- Introduction to Data Analysis & the Data Analysis Process
- Introduction to Data Types – qualitative and quantitative measures
- Introduction to Statistics.

Week Two

- Data Visualisations and their purpose
- Introduction to Visual Studio Code
- Data, Properties, and Methods in Python.

Week Three

- Variables and Operators
- If/Else and Control Flow
- Lists and Dictionaries
- Iteration in coding – for and while loops.

Week Four

- Functions
- Libraries and Package Managers
- Pair Programming Project – Magic 8 Ball
- Python Level Up – truthy/falsy, membership operators, list comprehension, try/except.

Week Five

- Introduction to Pandas and the DataFrame
- Accessing and amending data within a frame
- Data exploration in Pandas
- Using a data frame for descriptive statistics.

Week Six

- Data cleaning in Pandas
- Internet Speed test project – analysing personal internet speeds using automation and Pandas
- Introduction to Matplotlib and plot methods.

Week Seven

- Pair Project – Analysis and visualisation of sales data.

Week Eight

- Introduction to Databases
- Introduction to SQL
- Introduction to MySQL Workbench
- Introduction to SQL commands SELECT, FROM, WHERE, ORDER BY
- Aggregate functions in SQL.

Week Nine

- Introduction to Excel
- Table formatting, filtering and sorting in Excel
- Basic formula for exploration and analysis
- Introduction to the Aggregate function
- Visualisation within Excel
- Piviot tables and charts within Excel.

Week Ten

- Introduction to Power BI
- Transforming data in Power Query
- Drilling Down
- Creating interactive dashboards.

Week Eleven

- Final data analysis project – answering one of ten briefs by performing the data analysis process.

Week Twelve

- Presentation of final project.