FREE COURSE

Making your Data Analytics more powerful – Introduction to Artificial Intelligence (AI)

By Birmingham City University

Improve your data analytics skills with case studies and real-life data focused on building energy performance.

About this event

Objectives

Organisations in the built environment, construction and property related sectors need to react to ambitious targets to reduce Carbon emissions. This affects their own way of working as much as the products or services they provide. The need to measure, monitor and evidence such reductions, makes good data and the skills to interpret it essential. This course gives you the opportunity to build the right data skills.

Birmingham City University (BCU) will provide an introduction to the concepts of data analytics and the use of machine learning. Led by expert trainers, you will apply these techniques on real life data sets.

Join us if you would like to:

- Learn in interactive, small groups with other professionals from your sector
- Improve your skills by using advanced principles of data analytics to create comprehensive insights
- Take your first steps into the use of machine learning
- Working with real data on the energy consumption of buildings, understand the limitations and advantages of different approaches

Venue:
City Centre Campus, Curzon Street, Birmingham, B4 7XG or Online

Benefits to Business

- **Fully funded course; refreshments included on the day**

- **Receive a certificate for 12-hours of non-credit bearing CPD to evidence professional development**

- **Delivered by BCU experts that understand the latest data analysis methods and tools**

- **Applied learning supported by trainers to help you work through tasks**

- **Hybrid Course delivery: Option to join online if travel on both days is not possible**

- **Use free web based tools and ready prepared data to allow you to create your own analysis**

COURSE OVERVIEW

Continuous Professional Development (CPD)

	Topic
Day 1	Introduction to Data Analytics
	Data Analytics Pipeline
	Exploratory analysis
Case Study	Handling missing data and Visualisations
Day 2	Introduction to Machine Learning
	Model selection
	Metrics in Machine Learning
Case Study	Application of Clustering and Regression
Day 3	Introduction to Deep Learning
	Limitations
	Training data
Case Study	Teachable machine learning and TensorFlow playground

Accessing the Course

- You need to bring your own device to connect to the internet (BCU Guest Wifi)
  and work on the data
- Have Google Chrome installed and access to a Google Account
- Install free software as required

Learning Outcomes:

- Understand the data processing pipeline
- Understand the application of machine learning
- Understand the application of deep learning

	Course Dates		
	Day 1	**Day 2**	**Day 3**
Course 1	15/03/2022	22/03/2022	29/03/2022
Course 2	28/04/2022	05/05/2022	12/05/2022
Course 3	14/06/2022	21/06/2022	28/06/2022
Course 4	07/07/2022	14/07/2022	21/07/2022
Course 5	26/07/2022	02/08/2022	09/08/2022
Course 6	29/09/2022	06/10/2022	13/10/2022
Course 7	08/11/2022	15/11/2022	22/11/2022

Eligibility

This course is funded by BCU and the European Regional Development Fund.

To join the free course, you need to confirm that you are:

- **A small or medium sized enterprise**

- **Have a registered office in the West Midlands**

- **Have received less than €200,000 in state aid in the preceding three years**

Register your place

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Confirm your eligibility