HubLedge

DATA ANALYTICS
OVERVIEW

Introduction

Students will learn the fundamentals of data that are relevant today. You will become adept at transforming unstructured data into strategic insights to make informed decisions. The students will acquire the skills necessary to navigate the complex world of data with assurance and become proficient in identifying important trends and insights.

Ready to switch careers? HubLedge provides the ideal career pathway. In just 16 weeks, you will acquire the proficiency required to succeed in data analytics, leading to new opportunities and responsibilities. Our practical program, which includes over ten real-world projects, prepares you to take the lead in innovation practices and proactively respond to industry challenges. As businesses become more data-driven, data analytics is vital for staying responsive and relevant in a rapidly evolving digital landscape.

The Role of a Data Analyst

For businesses to make well-informed decisions, Data Analyst roles are crucial for turning raw data into actionable insights. Companies can increase productivity and gain a competitive edge by utilizing Data Analysts to forecast results, discover patterns, and optimize processes. They enable focused strategies on cost reduction and better client experiences in several industries. They also promote innovation through creating opportunities and supporting strategic planning. Data analysts are becoming increasingly important as companies become more data-driven to remain relevant and responsive in a fast-changing digital environment.

Data Analytics Career Outlook

The outlook for a career in data analytics in the UK continues to grow, with strong job security, growth opportunities, and high demand for skilled professionals.
With the need for qualified analysts continuing to grow across several industries, including technology, e-commerce, healthcare, and finance, the future of a career in data analytics has been extremely bright in 2024 and is likely to continue into 2025. Experts who collect, organise and analyse data are essential as businesses depend increasingly on data-driven initiatives. The scope and duties of data analysts are expanding due to emerging trends like automation, the integration of artificial intelligence (AI), and the rise of predictive analytics. These advancements are also

creating opportunities for entry into specialized positions like machine learning engineers and AI analysts.

According to the IT JobBoard, as of January 2023, the starting salary for a fresher in data analytics ranges from £35,000 to £40,000. With vast experience and specialisation, this value can surpass £75,000 in many cases. A senior analyst or specialist in London will receive more than £80,000.

Your Learning journey

This course is designed for both beginners with no experience in data analytics and experienced analysts looking to gain more technical knowledge and improve their careers. We accept students without prior coding experience.

Module 1 — Introduction to Basics of Data and Data Analysis

You will learn about data types, sources, and collection methods; the importance of data quality and preparation; foundational data analysis goals and processes; and gain an overview of essential data analysis tools and software.

- ✓ Understanding Data (Types and sources)
- ✓ Data Collection
- ✓ Data Quality (preparation)
- ✓ Data Analysis Fundamentals
- ✓ Data Analysis Tools

Module 2 — Statistics and Probability

You will learn foundational concepts in statistics, including measures of central tendency and dispersion, probability distributions, confidence intervals, hypothesis testing, regression analysis, and statistical tests (T-Test, ANOVA); and how to leverage them to analyse and interpret data effectively.

- ✓ Descriptive Statistics
- ✓ Basic probability concepts
- ✓ Inferential Statistics
- ✓ Regression Analysis
- ✓ Hypothesis Testing

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Module 3 — Microsoft Excel

You will learn the essential skills in Microsoft Excel, including navigation, data import, formulas, and functions. Master data cleaning (Power Query), data manipulation (sorting, filtering, pivot tables), advanced techniques (XLOOKUP, INDEX-MATCH), data visualization, and data analysis tools.

- Basics of Excel concepts
- Excel Data Cleaning and Transformation
- Data Cleaning with Power Query
- Data Manipulation (pivot tables)
- Advanced Techniques (LOOKUP, INDEX-MATCH)
- Data Visualization in Excel
- Advanced Excel for Data Analysis

Module 4 — SQL – Structured Query Language

You will learn database fundamentals, including tables and relationships, basic SQL commands (SELECT, INSERT, ALTER, CREATE), advanced techniques (JOINs, subqueries, CTEs), indexing, stored procedures, and efficient database design with normalization and ER diagrams.

- Introduction to Databases
- SQL Basics statements
- Data Retrieval and Manipulation
- Advanced AQL concepts
- Database Design

Module 5 — Enterprise Dashboards with Tableau

You will learn Tableau essentials, including installation, interface navigation, and data connections. Master data visualization techniques, build interactive dashboards and stories, explore advanced features (calculated fields, LOD), and apply Tableau in real-world business intelligence cases.

- Introduction to Tableau
- Creating charts with Tableau
- Dashboards and Stories
- Advanced Tableau Features
- Tableau for Business Intelligence

Module 6 — Enterprise Dashboards with Power BI

You will learn Power BI basics, including installation, data connectivity, and interface navigation. Master data transformation and modelling, create and customize visualizations, build interactive reports and dashboards, and explore advanced features like DAX and Power BI Service.

- Introduction to Power BI
- Data Transformation Using Power Query
- Creating different charts
- Reports and Dashboards
- Advanced Features (DAX, Power BI Service)

Module 7 — Python Basics

You will learn Python basics, including installation, syntax, and environment setup. Understand data structures (lists, tuples, dictionaries), control structures (conditionals, loops), and work with functions and modules for efficient coding.

- Introduction to Python
- Basic Python Syntax
- Data Structures in Python
- Control Structures
- Working with Functions and Modules

Module 8 — EDA (Exploratory Data Analysis) with Python

You will master data handling with Pandas, clean and transform data, visualize insights with Matplotlib and Seaborn, perform statistical analysis, and conduct Exploratory Data Analysis (EDA) to uncover data patterns.

- Pandas for Data Manipulation
- Data Cleaning transformation operation
- Data Visualization (Matplotlib and Seaborn)
- Statistical Analysis
- The EDA Process

Module 9

Elements of AI with Python

You will explore the fundamentals of Artificial Intelligence (AI), focusing on its application in Machine Learning (ML), predictive analytics, and deep learning. The module is designed to give you hands-on experience with key AI concepts.

- ✓ AI & ML basics
- ✓ Supervised vs Unsupervised learning
- ✓ Predictive analytics using ARIMA
- ✓ Deep learning with Tensorflow & Keras

Additional Learning

Capstone project

Capstone is a milestone in your learning journey. Designed to consolidate the knowledge you gained and applied to solve a real-world problem and present findings. Our instructors will provide guidance and support to ensure your project is of a high standard.

Portfolio projects

The projects you completed will be added to your portfolio to demonstrate the skills and experience you have gained from the course. Populating your portfolio with the right projects can go a long way toward building confidence that you're the right person for the job, even without previous work experience. At the end of the course, you will add eight projects to your portfolio.

What You'll Learn

By the end of this program, you will be able to:

- ✓ Proficiently handle data cleaning, transformation, and manipulation using tools like Python, SQL, and Excel.

- ✓ Analyze and summarize data using descriptive statistics and visual techniques to solve business challenges.

- ✓ Understand descriptive and inferential statistics, including hypothesis testing, regression analysis, and probability concepts.

- ✓ Create impactful charts and dashboards using Power BI, Tableau, or Matplotlib to present data-driven insights effectively.

- ✓ Craft compelling narratives to communicate insights to stakeholders.

The Learning Experience

Onboarding

Information is provided on the learning resources, schedule, installations and how to optimise the learning management platform and opportunities available in this programme.

Live instructor-led classes

Instructor-led training is conducted online, explaining new concepts and debriefing on assignments to deepen learning and understanding. The support team will follow up via email and phone calls to ensure assignments meet the deadlines.

Hands-on practical projects

Apply what you have learned to practical projects so that your acquired skills are put to use and useful, whether you are looking for work or seeking new opportunities.

Career Support

Our career support team provides the professional skills you'll need to get you ready for the job search. We offer guidance and support with resume construction, interview preparation, optimize your LinkedIn profile and keep you motivated with the job search.

Peer-to-peer discussion and activities

Further, explore real data using various instruments learned, share your experiences with peers and discuss key takeaways from lectures and other external inputs. Interact with other data analytics professionals, you can connect with to exchange ideas and share opportunities.

Physical meet-Up

Periodic physical activity-laden meetups. The meetups will bring the students together at a physical venue to exchange ideas, socialise and learn from each other.

Advanced Tools

Become proficient in using industry-standard tools such as Excel, Microsoft Power BI, Jupyter Notebooks, Python, and Tableau to get you ready for work opportunities

Format and Schedule

Cohort-based module of learning

- Instructors led online classes.
- Self-paced learning (asynchronous format)
- Peer review sessions to discuss challenging and complex topics.
- Live discussions with subject matter experts with live Q&A at the end of the presentation
- Periodic meetups are organised for face-to-face discussions with the instructors and among fellow students

Duration: 16 weeks – Part-Time: Learn without quitting your day job

Location: Fully online – allows you to study from anywhere in the world
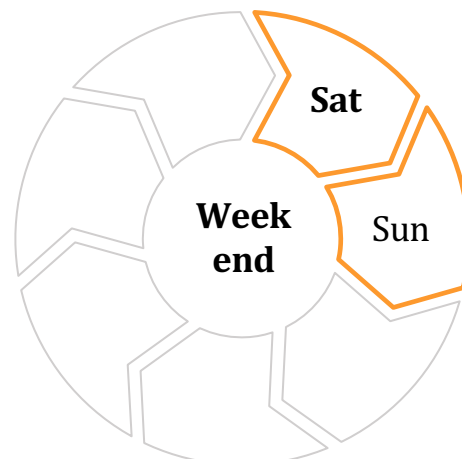
Virtual instructor-led classes on Microsoft teams
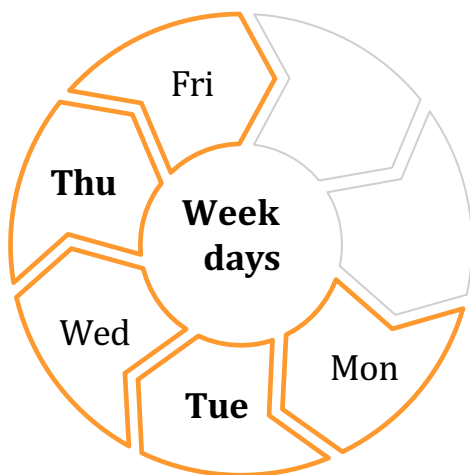
- **Tuesday**
- **Thursday**

6pm – 8pm (GMT)

- **Saturdays**

11am – 3pm (GMT)

Programme Fee and Payment Options

The table below explains the payment options we have in place to join this boot camp. Our prices are competitive and affordable for anyone interested in the programme.

Contact us via email if you have questions or are seeking clarification, and a member of our admissions team will respond.

Programme fee: £1000.00 Duration: 16 weeks/Part time						
Payment options	**Original Fee**	**Discount**	**1st Payment**	**2nd Payment**	**3rd Payment**	**Total paid**
Pay upfront	£1,000	£300	£700	£0	£0	£700
Pay in 2 instalments	£1,000	£200	£500	£300	£0	£800
Pay in 3 instalments	£1,000	£100	£600	£150	£150	£900

Join our next cohort

1   Complete the application form, using the links below
https://hubledge.com/data-analytics-application-form/

2   You will receive an automated email with instructions and information on the next steps

3   Complete the payment process to be accepted into the next cohort!

Are you ready for a career in Data Analytics?

If so, you're in the right place. We'll assist you in achieving your goal to become a skilled data analyst.

Contact Us:

🌐   www.hubledge.com

✉   admissions@hubledge.com

📞   Schedule a call

Disclaimer: We do not guarantee job placements, but we will support you with our resources to help you get into employment!