LEVEL 3 ALTERNATIVE ACADEMIC QUALIFICATION CAMBRIDGE ADVANCED NATIONAL IN

IT: DATA ANALYTICS

Bridging Work for New Year 12 IT:

(Summer Preparation)



Bridging Work for New Year 12 IT: Data Analytics (Summer Preparation)

Purpose: To prepare students for success in the OCR Level 3 IT: Data Analytics course by introducing key concepts, developing research and practical skills, and building confidence with course content.

Units Covered (Compulsory):

- 1. F200: Fundamentals of Data Analytics (Exam)
- 2. F202: Spreadsheet Data Modelling (NEA)

Bridging Tasks Complete on lined paper and/or digitally (ensure your work presentation is of high standard with clear titles/subtitles and numbered tasks/questions.

Task 1: What is Data Analytics?

- Develop understanding of the purpose and importance of data.
- Research the definitions of data, information, and knowledge. Provide real-world examples of each.
- Watch an introductory video on data analytics (e.g., YouTube: 'What is Data Analytics?'see links below).
- Write a short summary (150 words): What is data analytics and why is it important in today's world?

Task 2: Understanding Careers in Data Analytics

- Become familiar with job roles and skills in the field.
- Research any two of the following job roles: Data Analyst, Data Scientist, Data Engineer, Database Administrator.
- Create a fact file for each including: role description, key responsibilities, typical tools/software used, average salary, and required skills.

Task 3: Data Types and Formats

- Recognise different data types and formats used in IT.
- Define the following terms: qualitative data, quantitative data, structured data, unstructured data.
- Find examples (images, links, or screenshots) of at least three different file formats used for storing data (e.g., .csv, .json, .xml) and explain their purpose.

Task 4: Spreadsheets in Action

- Build basic spreadsheet modelling skills.
- Use Excel or Google Sheets to:
- Create a monthly budget for a fictional person.
- Include at least one SUM function, one IF statement, and one chart (bar or pie).
- Save your file and bring it to your first lesson.

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Task 5: Laws and Ethics

- Introduce key UK data legislation.
- Research and summarise the purpose of the following:
- - Data Protection Act (DPA)
- UK GDPR
- - Computer Misuse Act
- Write 2–3 sentences on how each law protects individuals and organisations.

Task 6: Reflection

- Consider your skills and goals.
- Write a short paragraph on what interests you most about this course and what you hope to achieve in Year 12.

Checklist for September

- [] Summary: What is data analytics?
- [] Two job role fact files
- [] Data types and file format examples
- [] Completed spreadsheet model (Excel/Google Sheets)
- [] Summary of three laws
- [] Personal reflection

Useful Links and Resources

BBC Bitesize: Data and Information -

https://www.bbc.co.uk/bitesize/guides/zpddpbk/revision/1

National Careers Service: Data Analyst – https://nationalcareers.service.gov.uk/job-profiles/data-analyst

What is Data Analytics? (YouTube) - https://www.youtube.com/watch?v=4z0BQgxqEQU

OCR Qualification Page – https://www.ocr.org.uk/qualifications/cambridge-advanced-nationals/it-data-analytics-level-3-certificate-extended-certificate-h019-h119/

Google Sheets Basics - https://support.google.com/docs/answer/6000292?hl=en

Excel Formulas Guide - https://exceljet.net/formulas

Submission:

Bring printed or digital versions of your tasks to your first lesson in September. Your teacher will check this work as part of your induction.