

Subject: OCR Cambridge Advanced Nationals Level 3 in IT: Data Analytics		Year Group: 12
<p><b>Term 1 Key Focus/Topic(s)</b>  Unit F200: Fundamentals of Data Analytics (75 GLH) – EXAM  Learning Outcome 1: Understanding data  - Data, information and knowledge  - Big data – concepts, uses, limitations  - Data/file formats (CSV, JSON, XML, audio/image/text)  - Data types and classification (structured/unstructured, qualitative/quantitative)  Learning Outcome 2: Managing data  - Data lifecycle (creation, storage, usage, archiving, destruction)  - Data analytics pipeline and its phases  - Data assurance (accuracy, timeliness, validity)  - Data gathering methods  - On-site and cloud data storage  - Data transformation (wrangling, cleansing)    Learning Outcome 3: Access and management of data  - Software platforms and tools  - Working across platforms  - Software interoperability</p>	<p><b>Term 2 Key Focus/Topic(s)</b>  Unit F200: Fundamentals of Data Analytics – EXAM continued  Unit F200 continued  Learning Outcome 4: Legal and regulatory considerations  - Data protection (UK GDPR, DPA)  - Regulatory compliance (ICO)  - Ethical use and misuse of data  Learning Outcome 5: Job roles in data analytics  - Skills, attributes and responsibilities  - Career pathways  - Working with the data pipeline    Unit F202: Spreadsheet Data Modelling (75 GLH) – NEA Coursework  Learning Outcome 1: Principles of spreadsheet modelling  Learning Outcome 2: Planning the design of a spreadsheet model  - Purpose of modelling  - Requirements of the client  - Design documentation  - Formula/function planning  - Scenario-based planning</p>	<p><b>Term 3 Key Focus/Topic(s)</b>  Unit F202 continued    Learning Outcome 3: Creating the spreadsheet model  - Cell formatting  - Logical operations  - Lookup functions  - Macros and automation  - Charts/graphs  - Error checking and validation  Learning Outcome 4: Delivering the outcomes  Learning Outcome 5: Evaluation  - Presenting the model to a client  - User feedback and adjustments  - Strengths and areas for improvement  - Documentation and final evaluation  - Completion and submission of NEA</p>
<p><b>Term 1 Assessment Opportunities:</b>  Low-stakes quizzes, short-answer assessments, formative exam tasks</p>	<p><b>Term 2 Assessment Opportunities:</b>  Full mock exam (Unit F200), NEA planning checkpoints for Unit F202</p>	<p><b>Term 3 Assessment Opportunities:</b>  Full mock exam (Unit F200), NEA planning checkpoints for Unit F202</p>
<p><b>Term 4 Key Focus/Topic(s):</b>  Unit F201: Big Data and Machine Learning (70 GLH) – EXAM  Learning Outcome 1: The scope of managing big data  - Characteristics of big data  - Sources and examples  - Impacts of big data</p>	<p><b>Term 5 Key Focus/Topic(s):</b>  Unit F201 continued  Learning Outcome 3: Big data, machine learning and AI  - Definitions and examples  - Machine learning algorithms and training data  - Applications in industry</p>	<p><b>Term 6 Key Focus/Topic(s):</b>  Unit F201 continued  Learning Outcome 5: Environmental and societal impacts  - Energy use and sustainability  - Societal and cultural change</p>

<p>Learning Outcome 2: Infrastructure challenges of big data</p> <ul style="list-style-type: none"> <li>- Data storage solutions</li> <li>- Network bandwidth and speed</li> <li>- Processing and computing power</li> </ul>	<p>Learning Outcome 4: Legal and ethical issues</p> <ul style="list-style-type: none"> <li>- Bias in data</li> <li>- Data privacy</li> <li>- Legal frameworks</li> </ul>	<ul style="list-style-type: none"> <li>- Green computing</li> <li>- Final exam preparation and revision</li> </ul>
<p><b>Term 4 Assessment Opportunities</b></p> <p>Practice papers and full mock exams for Unit F201, peer/self-assessment</p>	<p><b>Term 5 Assessment Opportunities</b></p> <p>Practice papers and full mock exams for Unit F201, peer/self-assessment</p>	<p><b>Term 6 Assessment Opportunities</b></p> <p>Self, peer, teacher and assessment.</p>

<p><b>Rationale:</b></p> <p>This qualification builds foundational and applied skills in data analytics, preparing learners for progression to higher education and the IT sector. Students will:</p> <ul style="list-style-type: none"> <li>● Develop essential knowledge, understanding, and skills relevant to the subject</li> <li>● Think in a way that is creative, innovative, analytical, logical and critical</li> <li>● Cultivate strong communication skills, vital for all aspects of further study and life</li> <li>● Acquire transferable learning and skills such as problem-solving, time management, and independent learning that are crucial for success in higher education and can be applied to real-life work situations</li> <li>● Build independence and confidence in applying knowledge and skills that are essential for moving on to higher education and are relevant to the ICT practitioners' sector and beyond</li> </ul>
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<p><b>Evaluation:</b></p> <p>This course is assessed through 40% external exam and 60% NEA coursework. During Year 12, students will complete:</p> <ul style="list-style-type: none"> <li>- Unit F200: Fundamentals of Data Analytics (exam)</li> <li>- Unit F201: Big Data and Machine Learning (exam)</li> <li>- Unit F202: Spreadsheet Data Modelling (coursework)</li> </ul> <p>Year 13 will focus on:</p> <ul style="list-style-type: none"> <li>- Remaining NEA units (e.g. F204: IoE, F206: Digital Marketing)</li> </ul>
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