

Archbishop Beck Catholic College Long Term Plan for Level 3 IT

Year 12

Autumn Half Term 1	Half Term 2	Key Vocabulary/Reading Opportunities
<p><u>Unit 2</u></p> <p>A1 Relational database management systems</p> <p>A2 Manipulating data structures and data in relational databases: Use of RDBMS software tools and structured query language (SQL) for defining, modifying and removing data structures and data</p> <p>A3 Normalisation: The role of normalisation to develop efficient data structures</p> <p>B1 Relational database design: Selection of RDBMS and SQL software, tools, techniques and processes</p> <p>B2 Design documentation: The features and characteristics of relational database design techniques and their application to solve problems</p> <p>C1 Producing a database solution: Select and</p>	<p><u>Unit 2</u></p> <p>Evaluation: Evaluating a design against the given requirements</p> <p>D2 Evaluation on database testing Evaluating the application of test data to ensure that the database solution meets Requirements.</p> <p>D3 Evaluation of the database Evaluating the software outcome against the given requirements</p> <p><u>Unit 3</u></p> <p>Explore the impact of social media on the ways in which businesses promote their products and services</p> <p><b>A1</b> Social media websites</p> <p><b>A2</b> Business uses of social media</p> <p><b>A3</b> Risks and issues</p> <p><i><b>AP 2 Assessment</b></i></p>	<ul style="list-style-type: none"> <li>• Primary keys,</li> <li>• Foreign keys,</li> <li>• Composite keys</li> <li>• Indexing</li> <li>• Tables</li> <li>• Fields</li> <li>• Data types,</li> <li>• Validations,</li> <li>• Relationships,</li> <li>• Stages of normalisation</li> <li>• Creating tables</li> <li>• Creating queries</li> <li>• Creating forms</li> <li>• Creating reports</li> <li>• Validation</li> <li>• Interface</li> </ul>

configure appropriate RDBMS and SQL tools  
 to produce a database solution to meet client's requirements  
 C2 Testing and refining the database solution

Unit 3

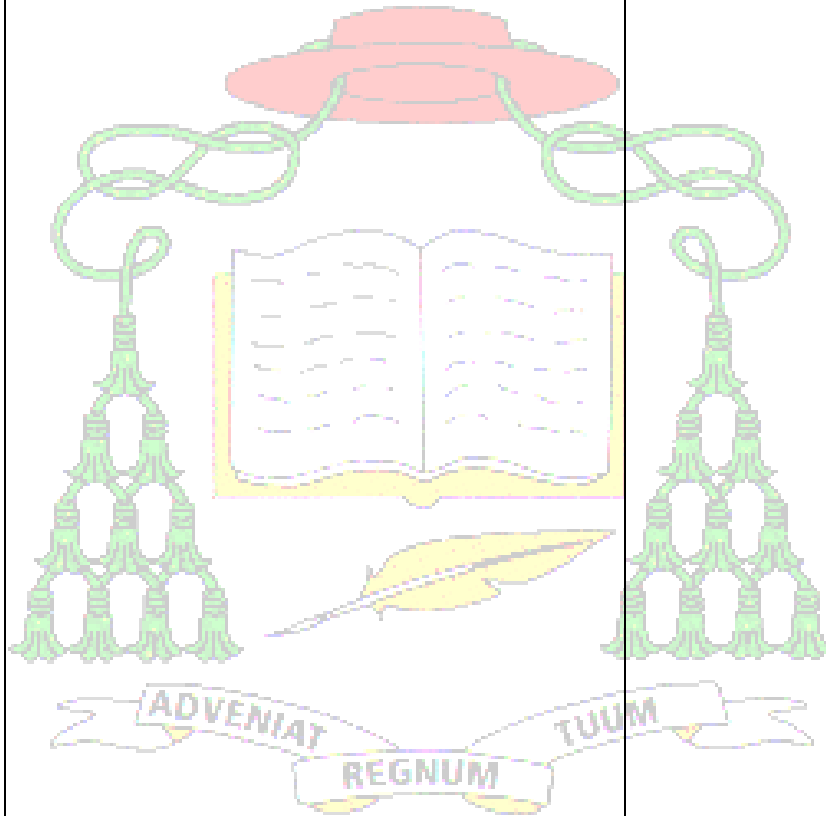
Explore the impact of social media on the ways in which businesses promote their products and services

**A1** Social media websites

**A2** Business uses of social media

**A3** Risks and issues Explore the impact of social media on the ways in which businesses promote their products and services

AP1 Assessment



**Spring Half Term 3**

**Half Term 4**

**Key Vocabulary/Reading Opportunities**

Unit 3

Component A 1/2/3  
 Component B 1/2

Facebook

<p><b>B1 Social media planning processes:</b> Processes to consider when planning the Potential use of social media in a business including.</p> <p><b>B2 Business requirements</b></p> <p><b>B3 Content planning and publishing.</b> Planning posts and other content to be published on social media websites, including:</p> <p><b>B4 Developing an online community</b> Working with a client to develop a strategy to encourage online community building, including:</p> <p>Implement the use of social media in a business</p> <p><b>C1</b> Creating accounts and profiles</p> <p><b>C2</b> Content creation and publication</p> <p><b>C3</b> Implementation of online community building</p> <p><b>C4</b> Data gathering and analysis</p> <p><b>C5</b> Skills, knowledge and behaviours</p>	<p>Component C 1/2 Component D 1/2/3</p> <p>Results received -Practising skills for Resit exam.</p> <p>All components will be covered. <b><u>AP3 Assessment</u></b></p> <p><b><u>Unit 3</u></b></p> <p>Develop a plan to use social media in a business to meet requirements</p> <p>B1 Social media planning processes</p> <p>B2 Business requirements</p> <p>B3 Content planning and publishing</p> <p>B4 Developing an online community</p> <p>B5 Developing a social media policy</p> <p>B6 Reviewing and refining plans</p> <p>Implement the use of social media in a business</p> <p><b>C1</b> Creating accounts and profiles</p> <p><b>C2</b> Content creation and publication</p>	<p>Twitter</p> <p>Instagram</p> <p>Posts</p> <p>Insights</p> <p>Target audiences</p> <p>Social media</p> <p>Tweet</p> <p>Instant messenger</p> <p>Indirect advertising</p> <p>Direct advertising</p> <p>Traffic</p> <p>Endorsement</p> <p>Information</p> <p>Website</p> <p>Brochures</p> <p>Business cards</p>
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	<p><b>C3</b> Implementation of online community building</p> <p><b>C4</b> Data gathering and analysis</p> <p><b>C5</b> Skills, knowledge and behaviours</p>	
<b>Summer Half Term 5</b>	<b>Half Term 6</b>	<b>Key Vocabulary/Reading Opportunities</b>
<p>Component A 1/2/3</p> <p>Component B 1/2</p> <p>Component C 1/2</p> <p>Component D 1/2/3</p> <p>Results received -Practising skills for Resit exam.</p> <p>All components will be covered.</p> <p><u>Unit 3</u></p> <p>Develop a plan to use social media in a business to meet requirements</p> <p><b>B1</b> Social media planning processes</p> <p><b>B2</b> Business requirements</p> <p><b>B3</b> Content planning and publishing</p> <p><b>B4</b> Developing an online community</p> <p><b>B5</b> Developing a social media policy</p> <p><b>B6</b> Reviewing and refining</p>	<p>C4 Data gathering and analysis</p> <p>Gathering and interpreting data on social media websites using dedicated tools, e.g. Facebook Insights, Twitter Analytics, Google Analytics and Tweet Reach</p> <p>C5 Skills, knowledge and behaviours</p> <p><u>Unit 6</u></p> <p>Understand the principles of website development</p> <p><b>A1</b> Purpose and principles of website products</p> <p><b>A2</b> Factors affecting website performance</p>	<p>Social media</p> <p>Facebook</p> <p>Twitter</p> <p>Google Analytics</p> <p>Tweet Reach</p> <p>Online Community Building</p>

plans

Implement the use of social media in a business

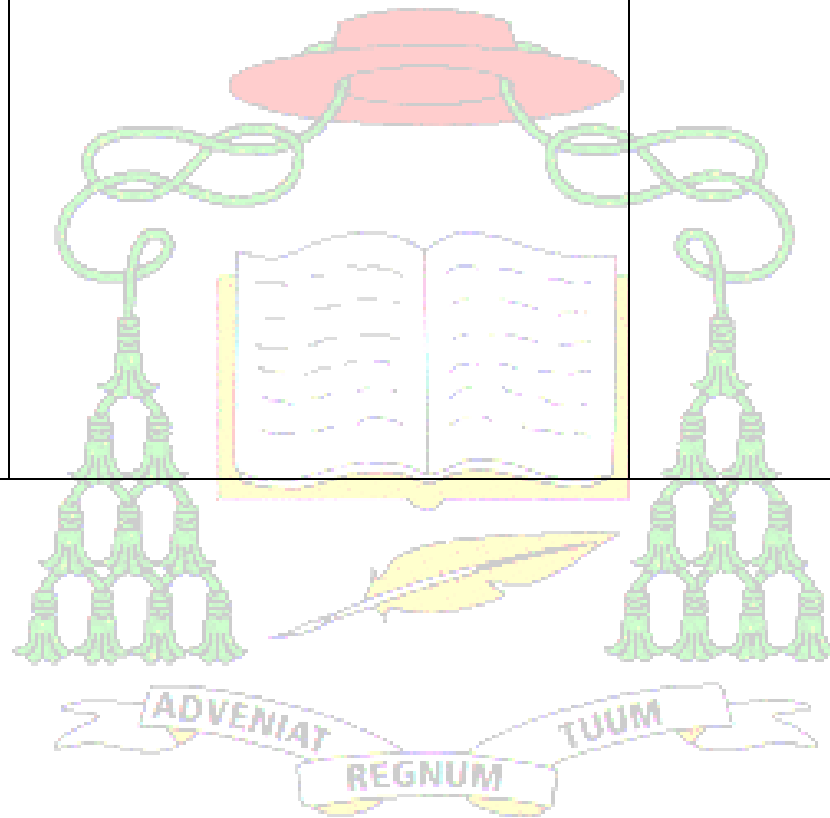
**C1** Creating accounts and profiles

**C2** Content creation and publication

**C3** Implementation of online community building

**C4** Data gathering and analysis

**C5** Skills, knowledge and behaviours

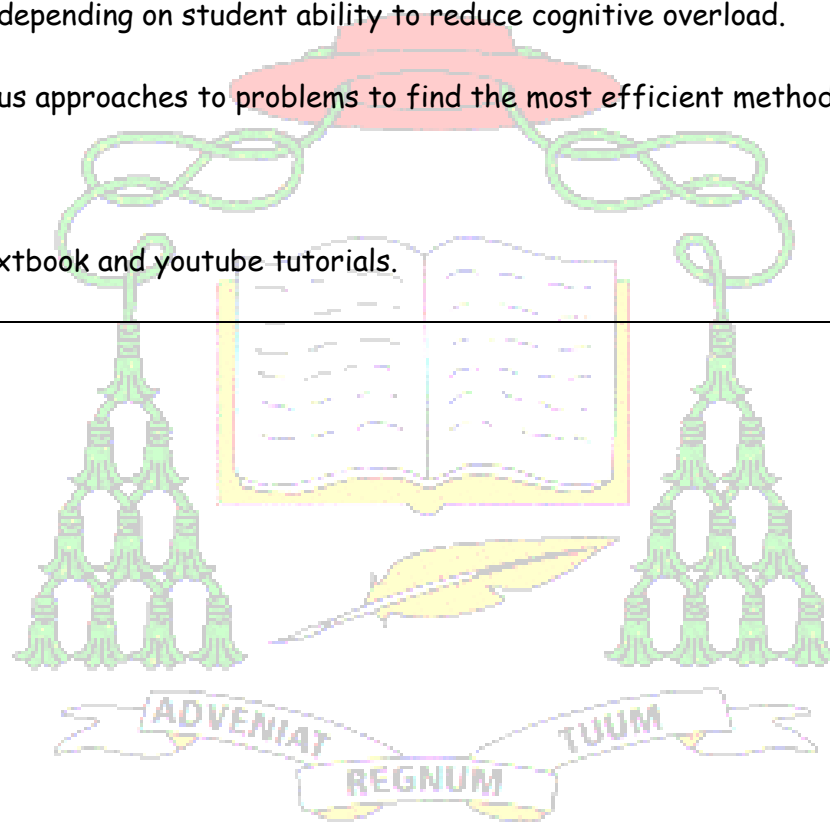


## Year 12

Wider learning experiences to support this subject.	Learning Characteristics instilled in the curriculum	Career Opportunities
<p>Online BTEC Level 3 IT Textbook</p> <p>YouTube tutorials for the software applications.</p> <p>Off-site business visits</p> <p>On-site guest speakers</p> <p>Case study resource bank</p> <p>Links to employability programme</p>	<p><b>Confidence</b> The subject allows for a significant development of general knowledge.</p> <p>Development of the use of software applications including PowerPoint, word, access, excel, website development software, app development software and design software.</p> <p>Developing the use of business and IT software to communicate in today's society.</p> <p><b>Positive</b> Development of transferable skills including interpersonal skills, communication skills and independence.</p> <p><b>Respectful</b> The students have to work independently and as teams which means they have to be respectful of each other's work and offer debate on various topic areas. This allows for a tolerance of other people's views and opinions.</p>	<ul style="list-style-type: none"> <li>• Work experience</li> <li>• University visits</li> </ul> <p>These interactive opportunities bring the subject to life and allow an exciting variety in teaching and learning delivery. It also ensures that different learning styles can be incorporated into the varied delivery.</p> <p>The above examples allow access to many potential future career paths, with many students choosing the subject in FE, HE and for career opportunities in the future.</p>

### Metacognition Methods applied in Teaching

- Consolidation exercise at the beginning of every lesson to revisit prior learning.
- Give sufficient thinking time during discussions.
- Split topics into appropriate chunks depending on student ability to reduce cognitive overload.
- Variation of teaching styles
- Discussion of solutions and the various approaches to problems to find the most efficient method.
- Modelling of extended questions
- Modelling of coursework activities
- Independent learning tasks.
- Wider reading through the online textbook and youtube tutorials.



Archbishop Beck Catholic College Long Term Plan for IT

Year 13

Autumn Half Term 1	Half Term 2	Key Vocabulary/Reading Opportunities
<p>Digital devices</p> <p>Use of devices;</p> <ul style="list-style-type: none"> <li>▪ Education and training</li> <li>▪ Creativity</li> <li>▪ Personal</li> <li>▪ Social</li> <li>▪ Retail/commerce</li> <li>▪ Organisational use</li> </ul> <p>Input/output systems</p> <p>Device flow diagram</p> <p>Input devices</p> <ul style="list-style-type: none"> <li>▪ Features</li> <li>▪ Examples</li> </ul> <p>Output devices</p> <ul style="list-style-type: none"> <li>▪ Features</li> </ul> <p>Examples</p> <p>Accessibility</p> <p>Accessibility of devices;</p> <ul style="list-style-type: none"> <li>▪ Trackball</li> <li>▪ Touchscreen</li> <li>▪ Eye motion</li> <li>▪ Braille embosser</li> <li>▪ Optical char recognition</li> </ul> <p>Adaptive technologies</p> <p>Data processing</p> <p>Manual processing</p> <p>Automatic processing</p> <ul style="list-style-type: none"> <li>▪ Biometrics</li> <li>▪ Barcodes</li> </ul>	<p>Networks</p> <p>Networks;</p> <ul style="list-style-type: none"> <li>▪ LAN</li> <li>▪ WAN</li> <li>▪ PAN</li> <li>▪ VPN</li> </ul> <p>Choice and performance</p> <p>User experience</p> <p>User needs</p> <p>Specifications</p> <p>Connectivity</p> <p>Cost</p> <p>Efficiency</p> <p>Compatibility</p> <p>Implementation</p> <p>Productivity</p> <p>Security</p> <p>Components</p> <p>Performance factors</p> <p>Protocols</p> <p>Protocols;</p> <ul style="list-style-type: none"> <li>▪ TCP/IP</li> <li>▪ SMTP</li> <li>▪ POP3</li> <li>▪ IMAP</li> <li>▪ H.323</li> <li>▪ SIP</li> <li>▪ RTP</li> <li>▪ HTTP</li> </ul>	<ul style="list-style-type: none"> <li>• Education</li> <li>• Training</li> <li>• Social</li> <li>• Multifunctional devices</li> <li>• Personal computers</li> <li>• Mobile devices</li> <li>• Servers</li> <li>• Entertainment systems</li> <li>• Digital cameras</li> <li>• Navigation systems</li> <li>• Data capture</li> <li>• Collection systems</li> <li>• Communication devices and systems</li> <li>• Commerce</li> <li>• Flow diagram</li> <li>• Input devices</li> <li>• Output devices</li> <li>• Accessibility</li> <li>• Trackball</li> <li>• Touch screen</li> <li>• Manual processing</li> <li>• Automatic processing</li> <li>• Storage devices</li> <li>• Protocols</li> <li>• Networks</li> <li>• Real-time operating system</li> <li>• Single-user single task</li> <li>• Single-user multi-tasking</li> <li>• Multi-user</li> </ul>



<ul style="list-style-type: none"> <li>▪ OMR/OCR</li> </ul> <p>Smart meters Storage devices Hard Disk Drives Solid State Drives SD Cards USB memory sticks Flash storage Optical disks Magnetic tape</p> <p><b>Threats to data</b></p> <p>Threats of data;</p> <ul style="list-style-type: none"> <li>▪ Malware</li> <li>▪ Hackers</li> <li>▪ Trojans</li> <li>▪ Phishing</li> <li>▪ Accidental damage</li> </ul> <p>Viruses Worms Spyware Fraud Reputation</p> <p><b>Legislation</b></p> <p>Legislation;</p> <ul style="list-style-type: none"> <li>▪ Data Protection act</li> <li>▪ Computer misuse</li> <li>▪ Copyright</li> <li>▪ WCAG</li> <li>▪ Health and safety</li> </ul> <p>Freedom of speech</p> <p><b>Online services</b></p> <p>Online services;</p>	<ul style="list-style-type: none"> <li>▪ HTTPS</li> <li>▪ FTP</li> <li>▪ SSL</li> <li>▪ TLS</li> <li>▪ POP</li> </ul> <p>VOIP</p> <p>Connection methods</p> <p>Wired Connection methods</p> <ul style="list-style-type: none"> <li>▪ Cat5</li> <li>▪ Coaxial</li> <li>▪ Fibre Optic</li> </ul> <p>Wired device connections</p> <ul style="list-style-type: none"> <li>▪ VGA</li> <li>▪ HDMI</li> <li>▪ USB</li> </ul> <p>Wireless connections</p> <ul style="list-style-type: none"> <li>▪ WiFi</li> <li>▪ 3G/4</li> <li>▪ Satellite</li> <li>▪ Microwave</li> <li>▪ Bluetooth</li> <li>▪ Wi-Fi</li> </ul> <p>Direct</p> <p>Operating systems</p> <p>Operating systems</p> <p>Purpose and role</p> <p>RTOS</p> <p>SUST</p> <p>SUMT</p> <p>MUOS</p> <p>Performance factors</p> <p>Security</p> <p>Memory management</p>	<ul style="list-style-type: none"> <li>• Graphical</li> <li>• Command line</li> <li>• Menu based</li> <li>• User experience</li> <li>• Ease of use</li> <li>• Performance</li> <li>• Availability</li> <li>• Accessibility</li> <li>• User needs</li> <li>• Specifications</li> <li>• Compatibility</li> <li>• Connectivity</li> <li>• Cost</li> <li>• Efficiency</li> <li>• Implementation</li> <li>• Timescales</li> <li>• Testing</li> <li>• Migration to new system(s)</li> <li>• Productivity</li> <li>• Security</li> <li>• Lossy</li> <li>• Lossless</li> <li>• Social media</li> <li>• Blog, microblog, vlog</li> <li>• Wiki</li> <li>• Chatrooms</li> <li>• Instant messaging</li> <li>• Podcasts</li> <li>• Forums</li> <li>• Viruses</li> <li>• Malware</li> <li>• Hackers</li> <li>• Phishing</li> </ul>
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<ul style="list-style-type: none"> <li>▪ Retail</li> <li>▪ Financial</li> <li>▪ Education</li> <li>▪ News/info</li> <li>▪ Entertainment and Leisure</li> <li>▪ Productivity</li> </ul> <p>Booking systems</p>	<p>Multitasking  Device drivers  <b>Interfaces</b>  Command line interfaces  Graphical user interfaces  Menu based interfaces  <b>IT Systems</b>  Factors of choice  User experience  Specifications  Connectivity  Cost  Efficiency  Productivity  Implementation  Security  <b>Online systems</b>  Cloud storage  Cloud computing  Personal use/ Professional use  Pros and cons  Online systems;  <ul style="list-style-type: none"> <li>▪ Features</li> <li>▪ Connectivity</li> </ul> Remote working  <b>Online communities</b>  Social media  Blogging  Wiki  Chatrooms  Instant messaging  Podcasts  Forums</p>	<ul style="list-style-type: none"> <li>• Accidental damage</li> <li>• Privacy</li> <li>• Environmental</li> <li>• Unequal access to information technology</li> <li>• Online behaviour and netiquette</li> <li>• Globalisation</li> <li>• Freedom of speech and censorship</li> <li>• Computer Misuse Act 1990</li> <li>• Police and Justice Act 2006 (Computer Misuse)</li> <li>• Copyright, Designs and Patents Act 1988</li> <li>• The Copyright (Computer Programs) Regulations 1992</li> <li>• The Health and Safety (Display Screen Equipment) Regulations 1992</li> <li>• Data protection legislation</li> <li>• Consumer Rights Act 2015.</li> </ul>
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V-Blogs

Microblogs

Implications;

- Privacy
- Cost
- User experience
- Cost
- Employee experience
- Working practices
- Ethics
- Social impacts

Productivity

Current systems

Security

Customer needs

Meeting needs

**IT systems**

Businesses;

- Collaborative working
- Version control
- Transactional data
- Targeted marketing
- Remote access

Uses and implications;

- Stock control
- Data logging/analysis
- General office tasks
- Creative tasks
- Online advertising

Manufacturing Security



**Impact on organisations**

Impacts;

- User experience



	<ul style="list-style-type: none"> <li>▪ Employee needs</li> <li>▪ Customer needs</li> <li>▪ Cost</li> <li>▪ Implementation</li> <li>▪ Integration of systems</li> <li>▪ Working practices</li> <li>▪ User support</li> <li>▪ Staff support/training</li> </ul> <p>Security</p> <p><b>Gathering data</b></p> <p>Gathering data;</p> <ul style="list-style-type: none"> <li>▪ Sources of data <ul style="list-style-type: none"> <li>▪ Primary</li> <li>▪ Secondary</li> </ul> </li> <li>▪ Data reliability</li> <li>▪ Questionnaires</li> <li>▪ Interviews</li> </ul> <p>Focus groups</p> <p><b>Processing data</b></p> <p>Processing data;</p> <ul style="list-style-type: none"> <li>▪ Accuracy</li> <li>▪ Methods of accuracy</li> <li>▪ Reliability</li> <li>▪ Validation</li> <li>▪ Verifications</li> <li>▪ Extracting and sorting data</li> </ul> <p>Numerical data modelling</p>	
<b>Spring Half Term 3</b>	<b>Half Term 4</b>	<b>Key Vocabulary/Reading Opportunities</b>
<p><b>Data representation/trend analysis</b></p> <p>Data representation;</p> <ul style="list-style-type: none"> <li>▪ Presentation</li> </ul>	<p>Website Development</p> <p>Planning, Creation &amp; Evaluation</p>	<p>Environment</p> <p>Unequal access</p> <p>Online behaviour</p> <p>Netiquette</p>

<ul style="list-style-type: none"> <li>▪ Trend analysis</li> <li>▪ Sources</li> <li>▪ Error reduction</li> <li>▪ Intuitiveness</li> <li>▪ Functionality</li> <li>▪ Performance</li> </ul> <p>Capability <b>Moral and ethical issues</b></p> <p>Environment Unequal access Online behaviour Netiquette Globalisation Freedom of speech Acceptable use Legislation</p> <p>Website Development Planning, Creation &amp; Evaluation</p>		<p>Globalisation Freedom of speech Acceptable use Legislation</p>
<b>Summer Half Term 5</b>	<b>Half Term 6</b>	<b>Key Vocabulary/Reading Opportunities</b>
<p>Website Development Planning, Creation &amp; Evaluation</p>	<p>Course Finished</p> 	

**Year 13**

<p><b>Wider learning experiences to support this subject.</b></p>	<p><b>Learning Characteristics instilled in the curriculum</b></p>	<p><b>Career Opportunities</b></p>
<p>Online BTEC Level 3 IT Textbook</p> <p>YouTube tutorials for the software applications.</p> <p>Off-site business visits</p>	<p><b>Confidence</b></p> <p>The subject allows for a significant development of general knowledge.</p> <p>Development of the use of software applications including PowerPoint, word, access, excel, website development</p>	<ul style="list-style-type: none"> <li>• Work experience</li> <li>• University visits</li> </ul> <p>These interactive opportunities bring the subject to life and allow an exciting variety in teaching and learning delivery. It also ensures that different learning styles can be incorporated into the varied</p>

<p>On-site guest speakers</p> <p>Case study resource bank</p> <p>Links to employability programme</p>	<p>software, app development software and design software.</p> <p>Developing the use of business and IT software to communicate in today's society.</p> <p><b>Positive</b> Development of transferable skills including interpersonal skills, communication skills and independence.</p> <p><b>Respectful</b> The students have to work independently and as teams which means they have to be respectful of each other's work and offer debate on various topic areas. This allows for a tolerance of other people's views and opinions.</p>	<p>delivery.</p> <p>The above examples allow access to many potential future career paths, with many students choosing the subject in FE, HE and for career opportunities in the future.</p>
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<p><b>Metacognition Methods applied in Teaching</b></p> <ul style="list-style-type: none"> <li>• Consolidation exercise at the beginning of every lesson to revisit prior learning.</li> <li>• Give sufficient thinking time during discussions.</li> <li>• Split topics into appropriate chunks depending on student ability to reduce cognitive overload.</li> <li>• Variation of teaching styles</li> <li>• Discussion of solutions and the various approaches to problems to find the most efficient method.</li> <li>• Modelling of extended questions</li> <li>• Modelling of coursework activities</li> <li>• Independent learning tasks.</li> <li>• Wider reading through the online textbook and youtube tutorials.</li> </ul>
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