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| **Subject:** Digital Information Technology Level 1/ 2 BTECYear 11 Curriculum Map 2022-2023 |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
| Half term 1 | A1 Modern technologies Understand how and why modern technologies are used by organisations and stakeholders to access and manipulate data, and to provide access to systems and tools to complete tasks. Learners should understand the implications of these tools and technologies for organisations and stakeholders. • Communication technologies: o setting up ad hoc networks (open Wi-Fi, tethering/personal hotspot) o security issues with open networks o performance issues with ad hoc networks o issues affecting network availability (rural vs city locations, developed vs developing countries, available infrastructure, mobile network coverage, blackspots). • Features and uses of cloud storage: o setting and sharing of access rights o synchronisation of cloud and individual devices o availability (24/7) o scalability (getting more by renting/freeing to save money). • Features and uses of cloud computing: o online applications o consistency of version between users (features, file types) o single shared instance of a file o collaboration tools/features. • How the selection of platforms and services impacts on the use of cloud technologies: o number and complexity of features o paid for versus free o interface design (layout, accessibility, mobile vs desktop) o available devices.How cloud and ‘traditional’ systems are used together: o device synchronisation o online/offline working o notifications. • Implications for organisations when choosing cloud technologies: o consideration of disaster recovery policies (service provider’s, organisation’s) o security of data (location, service provider’s security procedures and features) o compatibility o maintenance (software updates, downtime, staff expertise) o getting a service/storage up and running quickly o performance considerations (responsiveness to user, complexity of task, available devices, and communication technologies). | <https://www.google.com/search?q=communication+technology+careers&rlz=1C1GCEU_en-GBGB957GB970&oq=josb+in+user+interface&aqs=chrome..69i57j0i13j0i22i30l2j0i390l3.3616j0j4&sourceid=chrome&ie=UTF-8&ibp=htl;jobs&sa=X&ved=2ahUKEwj3kK_-s-n4AhXXPsAKHdsrAnIQutcGKAF6BAhEEAY#fpstate=tldetail&htivrt=jobs&htidocid=fcLapnesBIUAAAAAAAAAAA%3D%3D> | Knowledge Organisers:<https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/DIT-Component-3-KO.pdf> |
| Half term 2 | A2 Impact of modern technologies Learners should understand how modern technologies impact on the way organisations perform tasks. Learners should understand how technologies are used to manage teams, to enable stakeholders to access tools and services, and to communicate effectively. Learners should understand the positive and negative impact that the use of modern technologies has on organisations and stakeholders. • Changes to modern teams facilitated by modern technologies: o world teams (not bound by geographical restrictions, diversity) o multicultural o inclusivity (facilitation of member’s needs) o 24/7/365 (no set work hours, team members in different time zones) o flexibility (remote working vs office based, permanent vs casual staff).• How modern technologies can be used to manage modern teams: o collaboration tools o communication tools o scheduling and planning tools. • How organisations use modern technologies to communicate with stakeholders: o communication platforms (website, social media, email, voice communication) o selection of appropriate communication channels (private/direct message, public status update) for sharing information, data and media. • How modern technologies aid inclusivity and accessibility: o interface design (layout, font and colour selection)o accessibility features (screen reader support, alt text, adjustable typeface/font size, text to speech/’listen to this page’) o flexibility of work hours and locations.• Positive and negative impacts of modern technologies on organisations in terms of: o required infrastructure (communication technologies, devices, local and web-based platforms) o demand on infrastructure of chosen tools/platforms o availability of infrastructure o 24/7 access o security of distributed/disbursed data o collaboration o inclusivity (age, health, additional needs, multicultural) o accessibility (meeting legal obligations, provision requirements) o remote working. • Positive and negative impacts of modern technologies on individuals: o flexibility (home/remote working) o working styles (choice of time, device, location) o impact on individual mental wellbeing (depression, loneliness, self-confidence, separation from stressful environment, feel in control of own schedule, schedule adjusted to meet needs of family, less time commuting). |