		Validation Document
1	Title of Programme	a. Digital & Technology Solutions Top Up b. Digital & Technology Solutions Top Up (Software) c. Digital & Technology Solutions Top Up (Data Analytics) d. Digital & Technology Solutions Top Up (Networking)
2	Award (e.g. FdA, BA)	BSc (Hons)
3	Contained Award	BSc Digital & Technology Solutions Top Up
4	Awarding Body	TEC Partnership
5	UCAS code (if applicable)	TBC a. b. c. d.
6	HECOS codes	TBC a. b. c. d.
7	Mode of Study (full and/or part-time)	Full time Part time
8	Duration (total number of years)	1 year full time 2 years part time
9	Number of weeks per academic year	31 Each Trimester consists of 8 weeks of module delivery. Trimester 1 has an extra week in which students are prepared for study at the new level. There are 6 assessment weeks.
10	Accrediting Professional / Statutory Body (if applicable)	
11	Location of delivery and Faculty	Grimsby Institute
12	Entry requirements	

Students will be required to have successfully completed 240 credits from on a Computing or IT related foundation degree programme or equivalent.

As well as current student intake, the programme is open to students who has successfully completed a Foundation Degree programme relating to Information Technologies or Computer Science

Accreditation of prior learning

TEC Partnership encourages student transfers from other institutions. Applicants may be admitted with credit for prior certificated learning (APcL) or work/life experience or other uncertificated learning (APeL). Please refer to the HE21 Student Transfer and the Accreditation of Prior Learning.

International admissions

TEC Partnership recognises a wide range of entry qualifications as being equivalent to A' level standard; if students hold a qualification not listed above please contact TEC Partnership's admissions team on +44 (0) 1472 311222 ext 434.

International students must evidence they possess a satisfactory command of English language in terms of reading, writing, listening and are expected to have achieved Level B2 on the Common European Framework of Reference for Language (CEFR), as defined by UK Visas and Immigration

13	Minimum number of students required for the programme to run	6 for all combined pathways
14	Degree classification weighting	

Bachelors Top-Up Degree
The degree classification is awarded based on the average percentage mark achieved at level 6 of the degree.

15	Aims of the programme and distinctive features/fit with existing provision

This BSc (Hons) Digital and Technology Solutions Top-Up is an industry-relevant and innovative course that allows students to establish their place within the IT industry and identify the pathway they wish to undertake. The overarching aim of this qualification is to allow students to make this degree their own and specialise in an area of IT they have a passion for or wish to enter employment for. Modules on this course will not follow the level 4 and level 5 methodology of modules that focus upon one key element of IT, such as Web Development, Database Development and Project Management. Instead, modules upon this top-up will focus upon developing students' understanding of how the skills delivered in these modules combine and mesh together within an industry/organisational setting, both in individual roles and in group tasks and projects.

Programme Aims

The aims of this programme are:

- To enable students to critically evaluate the application of modern and emerging technologies within a range of industries
- To enable students to demonstrate and apply logical problem solving and critical thinking skills in the context of IT development and solutions
- To allow students to develop both technical IT and interpersonal skills across a range of independent and collaborate projects and IT solutions
- To prepare students to be innovative thinkers, and to enable to them to "think outside the box" in developing creative, appropriate solutions to complex problems
- To develop a theoretical and practical understanding of the use of data analytics and business intelligence within large enterprises
- To investigate the use of modern and innovative technologies across varying industries, including automatic, ubiquitous computing and augmented reality

- To provide the opportunity for students to individually specialise and tailor their learning experience to a particular topic within IT, undertaking projects to allow them a deeper undertaking within a topic of their choosing
- To allow students to critically reflect upon their personal development throughout the course of managing independent projects and specialist portfolio

This course will consider the understanding that the IT industry is one that develops at a rapid pace, with yearly innovations applied across a range of sectors. To this end, modules will be developed to "future proof" this top-up and programme for students, including modules that place a focus not just upon developing existing knowledge, but conducting research into current and potential future innovations. Students will have the opportunity to utilise the new, purpose built IoT IT suites featuring powerful Alienware workstations, as well as the additional hardware and peripherals the department has, such as the Augmented and Virtual Reality kits (Vive, Oculus, Rift, HoloLens). This will be particularly relevant within the planned "Innovation in IT" module.

A key goal of this qualification is to allow students to identify and specialise in their chosen area of IT. To this end, students will have the opportunity to choose an optional development project, which will specialise in Networking, Software Development or Data Analysis (such as data analytics, big data, business intelligence etc). This will be provided through three student-directed modules, in which they will identify, plan, design and develop a project that specialises in one of these three key aspects of IT. This will allow students to gain a pathway related programme title that will allow them to showcase to employers their key area of passion and research within IT. For any development project that does not relate to one of these three pathways, a non-specialised BSc (Hons) Digital and Technology Solutions will be awarded through undertaking a non-specialised "Development Project" module. Similarly, those who wish to conduct research and development projects across a mix of areas (e.g., networking and data) will also receive a non-specialised BSc (Hons) Digital and Technology Solutions title.

Students will identify and select their pathway and specialism prior to the completion of trimester 1 and the beginning of Trimester 2, in which these pathway modules begin delivery. Through this select, students will be enrolled onto the appropriate modules and programme that relates to the selected modules. Through consistent and effective communication with students, progress of their Independent Portfolio and Development Project will be monitored, to ensure these are appropriate to the chosen specialism, with the non-pathway alternative available should the students intended developments no longer relate to their selected modules. Should a student's artefact not relate to a pathway modules learning outcomes and programme learning outcomes, this artefact will be applied against the alternative, generalist module outside of the three pathways, and students therefore gain a non-pathway based programme award

The ability for students to "choose their own path" is one of the key considerations being made when developing this degree, and thus modules – while teaching students key technical and academic skills they will need - will also involve students being able to tailor their submitted assessments to the area of IT they wish to specialise in, such as data analytics for business purposes or relating to software development, SMART technologies for use within homes or organisations, or a focus upon SMART technologies within a networking environment.

Modules delivered in trimester 2 and 3 (full time) will be broad enough to allow for multiple disciplines to be pursued while keeping assessments uniform across all pathways. The approach will be a 20-credit dissertation that allows students to demonstrate in-depth, independent research which will be used to inform development practices within the chosen subject area. Furthermore, the previously discussed 20-credit development project will be used to allow students to demonstrate higher levels of development, ensuring critical reflection is used throughout to satisfy the requirements specifications. Alongside both mentioned 20-credit modules, a 40-credit module will be used to enable a professional development portfolio that allows students to capture their own CPD through ongoing reflection and

iterative prototype development, prior to final development seen in the development project module. Together, these three modules (totalling to 80-credits) will encourage professional attributes such as self-reflection, critical design and development, collaboration, and evidencing of product development. We will also utilise our collaboration with the Skills and Employability team as we seek real-life briefs for students to work on throughout these modules, allowing further collaboration with employers and the local market.

Students will achieve the 120 credits on this programme through successful completion of all mandatory modules (Innovation in IT, Business Intelligence and Dissertation), as well as completion of the 60 credits of optional modules. Students will be provided the option to select their optional 20 credit development module focus from the non-specialised and the three pathways related development modules, as well as the focus of their Independent Portfolio, which will consist of the 40 remaining credits of specialisation. A full 60 credit focus on either Software, Data Analytics or Networking within these two modules will allow students to gain the pathway-based programme title, whereas any other combination will allow students to gain the non-specialised BSc programme title.

The assessment methods on this course will involve a mixture of low weight (30-35%) theoretical assessments, and large weighted design and development assessments for all non-project modules. There will be a focus on design and practical related assessments for students to highlight their processes for problem-solving, critical thinking and self-reflection, highlighting an understanding of the progress they are making and how they are overcoming issues. Assessments will allow for significant use of criticality, as well as theoretical and evaluative study, and across practical assessments, students will be required to showcase evaluative and reflective techniques. For practical based assessments, students will be provided appropriate, open scenarios that allow them to explore varying solutions, rather than more railroaded practical deliverables, as level 4 and 5 modules may often take the form of. Students will be delivered and provided significant resources, but ultimately it will be their decision as to the technologies and/or programming languages that they will utilise to solve the provided case studies or project briefs.

Progression opportunities and existing provisions

Students will have the ability to progress on to this BSc programme from the existing FdSc Digital and Technology Solutions programme. This programme is designed to allow students to undertake this top-up programme with the existing knowledge and modules on the FdSc degree. Additionally, students will have the knowledge and ability to undertake an MSc following successful completion of this programme. Skills learned on this programme will allow students to undertake a Master's degree in the following topics:

- IT and Computing
- Computer Science
- Software Development
- Data Analytics/Business Intelligence
- Networking Technologies/Cyber Security

Upon successful completion of this programme, students will be able to enter the IT industry across a range of roles at an entry (Junior) level. This includes but is not limited to the following:

- Software Developers and Engineers
- Web Designer and Web Developers
- Network and IT Technicians
- Network Engineers
- Database Developers and Administrators
- 1st, 2nd and 3rd line IT support

- Data and Business Analysts

A focus on developing independent project-based assessments will also allow students to develop their skills in independent learning and self-management of projects. Within the IT industry, many roles such as database developers and web designers and developers can be undertaken by freelance individuals. As such, the experiences students gain on this qualification will allow them an understanding of undertaking a self-employed career path.

16a	Programme Learning Outcomes Upon successful completion of this programme a student will be able to...	
	Programme Learning Outcome	Subject Benchmark Reference
1	(a, b, c, d) Critically evaluate theories of computing using knowledge at the forefront of a discipline	3.3: I 3.3: iii 3.5: I 3.5: ii 3.5: iii
2	(a, b, c, d) Critically analyse complex and real-world problems and produce plans and implement solutions using project management techniques	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vi 3.3: vii 3.4: I 3.4: ii 3.4: iv 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
3	(a, b, c, d) Work independently and as part of a team to provide solutions to complex computing problems to deliver complete solutions	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vi 3.3: vii 3.4: I 3.4: ii 3.4: iii 3.4: iv 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iv 3.5: v 3.5: vi
4	(a, b, c, d) Communicate complex computing information and designs to specialist and non-specialist audiences verbally and in visual formats	3.3: I 3.3: iii 3.3: iv 3.5: I 3.5: ii 3.5: iii 3.5: iv
5	(a, b, c, d) Follow moral, ethical, and legal codes of conduct being able to negotiate ambiguous situations to ensure the public good is the central concern of all development	3.3: iii 3.3: viii 3.4: iv 3.4: iv 3.5: I 3.5: ii 3.5: iii 3.5: vi 3.5: vii
6	(a, b, c, d) Act with integrity working independently and in groups ensuring intellectual property and academic integrity are maintained	3.3: iii 3.3: viii 3.5: I 3.5: ii 3.5: iii 3.5: vi 3.5: vi 3.5: vii
7	(a, b, c, d) Demonstrate an understanding of project management methodologies and techniques in the management of small and medium scale development projects and portfolios	3.3: I 3.3: ii 3.3: iii 3.3: v 3.4: I 3.4: iii 3.4: iv 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
8	(a, b, c, d) Critically reflect upon self-managed projects and portfolios in order to identify areas for improvement and continued professional development	3.3: I 3.3: iii 3.3: vi 3.4: ii 3.5: I 3.5: ii
9	(a, b, c, d) Apply recognised research methodologies and techniques in context of a given IT-related research project, drawing effective conclusions and recommendations	3.3: I 3.3: ii 3.3: iii 3.4: ii 3.5: I 3.5: ii 3.5: iii
10	(a) Critically reflect on own skills covering a range of technologies during the design and development of an independent project	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vi 3.3: vii 3.4: I

		3.5: I 3.5: ii 3.5: iii
11	(a) Demonstrate knowledge of IT solutions development and theories, and propose solutions to complex problems utilising concepts around the chosen problem domain	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: iii 3.4: iv 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
12	(a) Apply appropriate and relevant development methodologies and techniques to plan, design, develop and thoroughly test an IT solution for the chosen problem domain	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
S1	(b) Critically reflect on own skills of software development covering a range of technologies during the design and development of software (Software)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vi 3.3: vii 3.4: I 3.5: I 3.5: ii 3.5: iii
S2	(b) Demonstrate knowledge of software development, theories and propose solutions to complex problems utilising concepts around the chosen problem domain (Software)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: iii 3.4: iv 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
S3	(b) Apply software development methodologies and techniques to plan, design, develop and thoroughly test software applications and prototypes. (Software)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
D1	(c) Critically reflect on own skills of data analytics covering a range of technologies during the design, development and execution of data analytics solutions (Data Analytics)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vi 3.3: vii 3.4: I 3.5: I 3.5: ii 3.5: iii
D2	(c) Demonstrate knowledge of data analytics theories and propose solutions to complex problems utilising concepts around the chosen problem domain (Data Analytics)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: iii 3.4: iv 3.4: v 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
D3	(c) Critically evaluate upon the use of data and business analytics within business applications, for short- and long-term decision making (Data Analytics)	3.3: I 3.3: ii 3.3: iii 3.3: vi 3.4: ii 3.5: I 3.5: ii 3.5: iii 3.5: vi
N1	(d) Critically reflect on own skills of networking covering a range of technologies during the design and development of local and wide area networks (Networking)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vi 3.3: vii 3.4: I 3.5: I 3.5: ii 3.5: iii
N2	(d) Demonstrate knowledge of networking theories and propose solutions to complex problems utilising concepts around the chosen problem domain (Networking)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: iii 3.4: iv 3.4: vi 3.5: I 3.5: ii 3.5: iii 3.5: vi
N3	(d) Apply theoretical and practical networking principles and technologies in order to develop Local and Wide Area Networks (Networking)	3.3: I 3.3: ii 3.3: iii 3.3: iv 3.3: v 3.3: vii 3.4: I 3.4: ii 3.4: v 3.4: vi

				3.5: I 3.5: ii 3.5: iii 3.5: vi

16b	Additional Outcomes aligned to PSRB or Apprenticeship Standards	
	N/A	

17	Graduate Attributes and Threshold Characteristics

Level 6

A student achieving level 6 of the programme will have demonstrated the following knowledge, skills and threshold characteristics:

- The ability to communicate ideas and demonstrate technologies to both technical and non-technical audiences, verbally and visually
- The ability to apply problem solving and critical thinking skills to solve complex IT problems
- The ability to critically evaluate and compare key competing technologies used within IT solutions
- The ability to work independently and self-manage independent development projects, demonstrating appropriate project management skills
- The ability to demonstrate key technical skills in the development of IT solutions

18	Programme Structure

Module Title	Core/ Option	Credits	Level	Delivery T1/T2/T3	Pathways
Full Time					
Innovation in IT	C	20	6	T1	a, b, c, d
Business Intelligence	C	20	6	T1	a, b, c, d
Dissertation	C	20	6	T1/T2	a, b, c, d
Development Project	O	20	6	T3	a
Development Project (Software)	O	20	6	T3	b
Development Project (Data Analytics)	O	20	6	T3	c
Development Project (Networking)	O	20	6	T3	d
Independent Portfolio	C	40	6	T2/T3	a
Independent Portfolio (Software)	C	40	6	T2/T3	b
Independent Portfolio (Data Analytics)	C	40	6	T2/T3	c
Independent Portfolio (Networking)	C	40	6	T2/T3	d

PART TIME (2 YEARS)					
Year 1 – 60 CREDITS					
Business Intelligence	C	20	6	T1	a, b, c, d
Dissertation	C	20	6	T1/T2	a, b, c, d
Development Project	O	20	6	T3	a
Development Project (Software)	O	20	6	T3	b
Development Project (Data Analytics)	O	20	6	T3	c
Development Project (Networking)	O	20	6	T3	d
Year 2 – 60 CREDITS					
Innovation in IT	C	20	6	T1	a, b, c, d
Independent Portfolio	O	40	6	T2/T3	a
Independent Portfolio (Software)	O	40	6	T2/T3	b
Independent Portfolio (Networking)	O	40	6	T2/T3	c
Independent Portfolio (Data Analytics)	O	40	6	T2/T3	d

19	Teaching and Learning Strategy

The teaching and learning strategy for this module will be a combination of tutor-led seminars and supported open workshops, focusing on developing the student's learning and supporting them in conducting independent research for their chosen projects and assessments. We will invite in relevant industry professionals to host workshops and guest lectures across the three trimesters, and we work in collaboration with the HE Employability team to assist students in their employability skills, as well as job searches and graduate prospects. A focus on the teaching strategy for this level 6 top-up is to guide students as much as directly teaching them. Modules relating to Innovation in IT will be aimed at student research into innovative technologies within IT, as they will be expected to develop their own unique solutions to identified problems. There will be elements of group work across this top-up, as with the modules on the FdSc Digital and Technology Solutions, allowing students to work collaboratively on larger scale assessments and projects, again permitting students where possible to undertake roles within their groups that relate to their preferred area within IT (network engineer, software developer, UX & UI designer etc).

Business Intelligence and Innovation for IT will be the two core modules delivered to students, highlighting the application of data and reporting within large organisations for business decision making processes, and allowing students to conduct research into the use of modern technologies such as VR, AI and Machine Learning within a range of industries. After this first phase of Level 6, students will then undertake phase 2, in which they will take complete ownership of their qualification and specialise within a chosen area (Software, Network, Data), or undertake mixed research and development.

Pathway specialism

The independent portfolio and development project will allow students to tailor their research and development during level 6 to an area within the IT industry they have a passion for or wish to enter a role within. Students will be guided through the development of this project (though students will be solely responsible for analysis, planning, design, and development) and the longer-term portfolio, to showcase significant independent learning of skills, techniques, and industry standard technologies.

Students will specialise from the start of trimester 2 and shall be enrolled on to the appropriate module and programme to suit their chosen pathway at the beginning of the year in trimester 1. Upon selection of a pathway, students on each Development Project and Portfolio pathway will infill into the same teaching sessions, for the delivery of content related to the creation and management of the Portfolio and Independent Project

The smaller 20 credit dissertation will allow students to undertake theoretical research into a specific area of research and develop a critical understanding in a key area of interest to them guided by subject specialist tutors.

20	References used in designing the programme

Computing Benchmark statement (2022)

21	Indicators of quality and standards

The programme will follow the QA standards of TEC Partnership. The programme has been written with reference to appropriate external reference points.

TEC Partnership undertakes a number of scheduled internal periodic and thematic reviews throughout each academic year to assure itself of the quality and standards of its provision.

External Examiners reports are received by the HE Quality Office and a copy forwarded to the relevant academic area at TEC Partnership. TEC Partnership requires action plans to be created for any actions recommended as a result of student, tutor, moderator or External Examiner comments. These are reported to our HE Committees. TEC Partnership also monitors External Examiner reports, and these are reported on through faculty self-evaluation and enhancement documents, the quality enhancement report and the External Examiner's institutional analysis report.

Annual course reviews (AMRs) will take place in line with the requirements of TEC Partnership and actions planned to rectify any weaknesses and further develop the quality of the provision. These AMRs are moderated internally by the Curriculum Manager (or equivalent) and then submitted to the HE Quality Office to ensure key sources such as External Examiner reports are fully reflected upon before being published and also to reduce variability in the quality of information presented.

22	Particular support for learning

The needs of disabled learners are taken into account in the design of all learning programmes.

Students will be screened at induction to identify those with individual learning support needs. TEC Partnership has well-established procedures in place to support all identified students through the application and assessments for the Disabled Students' Allowance to secure any specialist equipment or tuition which is required.

Students will also be invited in for advice and support through the DSA procedure.

Each student is entitled to one tutorial per semester with the programme leader to discuss individual issues relating to both modules and the programme overall.

In addition to study skills embedded in the programme, TEC Partnership employs an Academic Achievement Coach. The Academic Achievement Coach is responsible for working with students to support them in the development of their study skill abilities and includes interventions such as support towards use of ICT, giving presentations, using formal writing and appropriate academic conventions, avoiding plagiarism, analytical and critical writing skills. Students have access to one-to-one support and also timetabled study skill workshops.

23	Methods for evaluating and improving the quality of learning

All students will have the opportunity to comment on the quality of the learning experience on each module. Staff will also be expected to complete module evaluations for each module that they deliver. This feedback must be analysed by the module leader and the results fed into the annual monitoring report, faculty self-evaluation document and subsequent year's module handbook. Programme and module leaders must give consideration to modification to improve the delivery of any module, and this should be recorded in the annual monitoring report and carried forward for minor or major modifications as appropriate.

TEC Partnership's policy requires that all teaching staff should be observed delivering learning at least annually. Teaching and learning that does not reach the minimum expected standard will result in an action plan agreed between the line manager and the member of staff.

Student satisfaction is measured by student surveys on larger courses, on the smaller courses student opinion may be gathered by other survey means. Student representatives are invited to course team meetings and additionally have the opportunity to raise items with the course leader at individual meetings outside the course team.

Further, TEC Partnership facilitates the Student Senate, which consists of student representatives from each HE department. The Student Senate meets on a monthly basis and their remit is to:
- Consider matters relating to the student experience within Higher Education.
- Enhance the Student Voice within TEC Partnership's Higher Education strategic and operational agenda.
- Provide feedback on areas of good practice.
- Put forward suggestions of the development of Institutional policy and strategy.
- Enhance the student learning experience by promoting academic and research events and cultural events on campus.
- Increase student engagement in all aspects of Higher Education quality processes.

24	Identify any ethical issues that relate to this programme's teaching and assessment

While the core modules should present no ethical issues student will undertake the development of their development project which will require the students to engage with an external employer/agency in order to provide foundation for and approval of the project. With this in mind, it is possible that issues may arise regarding GDPR (use of live data within projects) and that students may also need to conduct primary research within the problem domain of the project. This will also similarly apply to the independent portfolio, which will include development of software, data, or networking related solutions that in many cases will be sourced from employers.

To address this the development project will require students to complete and have approved an ethics proposal prior to any development activity or primary research taking place.

Similarly, the theoretical dissertation will have potential to cover a range of ethical issues dependent upon the nature of the students chosen area of research, and thusly ethics approval will be required before the undertaking of any primary research for the dissertation

Ethics proposals will then be reviewed by the programme leader and the departmental ethics co-ordinator prior to being presented to the Institute's ethics committee for review (if this is deemed to be necessary by the programme leader and departmental ethics co-ordinator).

25	For Foundation Degrees is the programme Work Based or Work Related?	N/A

26	How are WBL/WRL opportunities managed, monitored and reviewed, and what particular arrangements are there for student support

This degree has work related learning across all levels. Students are encouraged to self-initiate the development of contacts and industry links with the Programme Leader and Module Leader support. Work related learning could take place through potential collaboration with IT services, MIS developers or innovate, or students that have sourced their own external placement or external brief will also be required to give regular updates to their tutors, although this may be subject to flexible timetabling.

Students will be required to attend regular formal timetabled tutorials where they can discuss their progress with the Programme Leader. Any opportunities that are offered externally are subject to a preliminary risk assessment, with students being supported through placement visits from the teaching staff as well as the HE Skills and Employability Team through purchased hours with employability tutors.

27	Resources Supplied to the Student

- IOT computer suites (18 workstations per room)
- Alienware workstations for development and rendering
- Office 365 and suitable collaboration, communication technologies
- Access to networking racks containing routers, switches, and servers
- Networking equipment to allow students to make their own networking cabling to utilise and test
- Packet Tracer and GNS3 for network simulation
- Virtual box and workstation player for network virtualisation
- MYSQL, SQL Server and PHPMyAdmin for undertaking database development
- Visual Studio, Atom, Creative Cloud and equivalent IDE's for web and software development

Students will also have access to the library catalogue and be able to order books on site.

28	Resources needed to pass the programme

Students will be expected to purchase external storage for data storage and external back-up, and transfer of large files not suitable through cloud storage

Appropriate stationery for notetaking and written tasks is also expected (pen, notebooks, paper, rulers, etc)

29	Revision History

Version	Details of major modification	Date of approval
1		
2		
3		
4		

						Curriculum Map

Key	\multicolumn{5}{l}{Work – State WB or WR or blank Comp = Compensatable Y or N}	\multicolumn{18}{l}{P = Partially achieved Learning Outcome F = Fully achieved Learning Outcome}

Module name	Level	Work	Module Leader	Assessment and Weighting	Comp	1	2	3	4	5	6	7	8	9	10	11	12	S1	S2	S3	N1	N2	N3	D1	D2	D3
Business Intelligence	6	WR	Yasmin Tuck	• Technical Report and Design (30%) • Presentation and Reflection (70%)	Y	F	F		F		F													F	F	F
Innovation in IT	6	WR	Ashley Darley	• Technical Report (50%) • Presentation (50%)	Y	F	F		F	F	F			F												
Dissertation	6	WR	Yasmin Tuck	• Dissertation (100%)	N	F	F		F	F	F		F	F												
Development Project	6	WR	Ashley Darley	• Planning and Design (40%) • Project Demonstration and Evaluation (60%)	N	F	F	F	F	F	F	F	F	F	F	F	F									
Development Project (Data Analytics)	6	WR	Ashley Darley	• Planning and Design (40%) • Project Demonstration and Evaluation (60%)	N	F	F	F	F	F	F	F	F											F	F	F
Development Project (Networking)	6	WR	Ashley Darley	• Planning and Design (40%) • Project Demonstration and Evaluation (60%)	N	F	F	F	F	F	F	F	F								F	F	F			

Module	Credits		Tutor	Assessment																										
Development Project (Software)	6	WR	Ashley Darley	• Planning and Design (40%) • Project Demonstration and Evaluation (60%)	N	F	F	F	F	F	F	F	F					F	F	F									
Independent Portfolio	6	WR	Ashley Darley	• Independent Portfolio (80%) • Personal Reflection (20%)	N	F	F	F	F		F	F	F	F	F	F	F											
Independent Portfolio (Data Analytics)	6	WR	Ashley Darley	• Independent Portfolio (80%) • Personal Reflection (20%)	N	F	F	F	F		F	F	F												F	F	F
Independent Portfolio (Networking)	6	WR	Ashley Darley	• Independent Portfolio (80%) • Personal Reflection (20%)	N	F	F	F	F		F	F	F							F	F	F					
Independent Portfolio (Software)	6	WR	Ashley Darley	• Independent Portfolio (80%) • Personal Reflection (20%)	N	F	F	F	F		F	F	F					F	F	F							

TEC Partnership Graduate Mapping			
TEC Partnership Graduate Attributes	**Assessment References**	**Module References**	**To be covered in tutorial**
Fortitude and Criticality — • Adaptability to changing situations	Assessments within the Development Project module will present situations that will force students to adapt to change, through situations such as changing client	The Development Project and Independent Portfolio modules will allow graduates to develop and enhance their adaptability, managing projects independently in	

		requirements, or resistant stakeholders	which change management are vital aspects, particularly when dealing with external clients	
	• Being productively disruptive	Assessments that form part of the Innovation in IT and the Development Project modules will potentially allow for being productively disruptive, through researching, recommending and applying changes to organisations or processes	The Innovation in IT module embeds this attribute throughout, with its focus upon innovation with organisations and projects, and impacts and implications of organisations	
	• Resilience	Assessments within the development project and portfolio modules will allow for the building up of resilience through the self-management of projects	The Development Project, Dissertation and Independent Portfolio modules will allow for the development of resilience through the independence necessary to self-manage projects within these modules	
	• Preparing for unknown futures	Innovation within IT assessments allow for the research and consideration of current and emerging technologies that may be able to be applied in innovative and unique manners in order to solve issues, teaching preparedness for the future	The Development Project, Dissertation and Independent Portfolio modules all contain elements of self-reflection and evaluation, in highlighting ones own strengths and weaknesses, and the importance of continued professional development	
	• Finding alternative solutions to problems	The Innovation in IT module's Assessment 2 allows students to identify problems within existing organisations or processes and identify	Teaching within the Development project module will cover the consideration and planning for alternative solutions to identified	

Teamwork				
		alternative solutions to these problems. Additionally, the Development Project will involve the consideration of potential alternative solutions to identified problems during planning and design assessment	problems, and the recommendation of a chosen course of action.	
	• Human interaction skills	The Development Project module will allow students to interact with external clients and individuals in the seeking out and implementation of their project for this module.	The Development Project module will allow students to interact with external clients and individuals in the seeking out and implementation of their project for this module. Additionally, the Dissertation module allows students to undertake primary research collection through methods such as interviews and focus groups	
	• Leadership and followership skills		The Development Project and Independent Portfolio requires students to take charge of their own project independently, undertaking a "project manager" of their assessments for these modules. Additionally, the Innovation in IT module will deliver and assess in relation to these skills due to the importance of strategic management within innovation	

		• Project development and/or management	Development project assessments will require students to display project management and development skills continuously	The Development Project and Independent Portfolio requires students to take display project management skills and knowledge throughout.	
Presentation		• Confidence in communication	Presentations will be a common form of assessment throughout this module to allow for the development of key communication skills	Students will be required to formulate ideas and deliver these to tutors both through written and verbal mediums.	
		• Digital skills and adaptability	All assessments will require students to utilise and develop their digital skills, through practical creation of artefacts, or the production of presentations and recordings for assessment	Digital skills will be embedded throughout all modules of this programme as a mandatory necessity. Adaptability to changing circumstances will be key through the Development Project learning and assessment, as well as being embedded through Innovation in IT, with a focus upon how individuals and organisations adapt to innovation and change	
		• Time Keeping	Presentations will be a common form of assessment throughout this module which will be time constrained to an allotted time period that students must adhere to	The Development Project and Independent Portfolio require students to undertake time management throughout as part of their project management techniques, including development Gantt charts, work breakdown structures and understanding critical path analysis	
		• Self-Presentation	Students will be required to display self - presentation		

		through the varied assessment methods displayed on this programme, particularly presentations, that will require students to deliver professional presentations that make their knowledge of these subject clear to audiences		
Personal Values	• Professional attitudes and values	Professional attitudes and values will be embedded through all modules on this assessment, and professionalism will be required during Project modules as students will be working with clients, as well as the Dissertation module that will also require professionalism throughout		
	• Ethics and morals	Ethics and morality will be key considerations of assessment 1 and 2 within the innovation and IT module, with students required to investigate ethical, moral and legal implication of specified technologies or recommendations	Professional attitudes and values will be embedded through all modules on this assessment, with a focus within the Development Project, portfolio and innovation in IT modules that relate to ethics and morality	
	• Self-Care and care of others		Self-care and care of others is embedded into most modules, relating to the ethics and morality covered above.	