

PROGRAMME SPECIFICATION (APPRENTICESHIP)

The Programme Specification is designed for apprentices, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes.

SECTION A: DETAILS OF THE PROGRAMME AND AWARD

Programme Title	BSc (Hons) Digital and Technology Solutions
Apprenticeship Standard	Digital and Technology Solutions Professional (Level 6)
Awarding Body	Buckinghamshire New University
Teaching Institution	Buckinghamshire New University High Wycombe Campus Aylesbury Campus Uxbridge Campus
Faculty	Design, Media & Management
Name of Final Award	Bachelor of Science with Honours, BSc (Hons)
NQF/FHEQ Level of Qualification	Level 6: Bachelor's degree with honours
QAA Subject Benchmark Statement	Subject Benchmark – Computing (2016)
Course Code(s)	BB1DTS2
Mode of Delivery	Part-Time
Length of Study	3 years
Regime of Delivery	Work-Based Learning
Language of Study	English
Programme Accreditation	n/a
Month and Year valid from	01 September 2017
Publication & Revision Dates	01 August 2017, Sept 2020

Programme Introduction

Degree Apprenticeships combine university study and work-based learning to enable apprentices to gain a full bachelor's degree. This provision of an academic undergraduate degree is integrated with experience, practice and learning in the workplace. An apprentice has paid employment status and does not pay any training costs or student fees. Degree Apprenticeships are co-designed by employers ensuring that apprentices are equipped with the skills employers need and for their own future career.

The Standard and End Point Assessment Plan (EPA)

As well as containing on programme training and assessment, all apprenticeship standards must contain an end-point assessment (EPA). All apprentices must undertake an independent end-point assessment, which is a synoptic assessment of the knowledge, skills and behaviours that have been learnt throughout the apprenticeship. The purpose of the assessment is to make sure the apprentice meets the standard set by employers and are fully competent in the occupation. It is taken by apprentices at the very end of the on-programme phase of training when their employer (and in some cases their training provider) is satisfied that they have met the "gateway" criteria to undertake the

assessment. End-point-assessments are graded and an apprenticeship certificate is only awarded after end-point assessment is successfully completed.

The EPA for the Degree Apprenticeship in Digital and Technology Solutions Professional has been designed by employers from across the sector. The Degree Apprenticeship for one of the occupations defined in the Standard (Software Engineer; Network Engineer; Cyber Security Analyst; IT Consultant; Data Analyst; Business Analyst) leads to a Bachelor Degree (Science) with Honours.

The trailblazer group have specified that the EPA for this apprenticeship is:

- Integrated EPA – integrated into the design and assessment of this Degree Apprenticeship (and evaluated as part of CO698 Synoptic Project).

Distinguishing Features of the Programme

The course is designed specifically for current or aspiring practitioners in the IT-related areas covered by the Apprenticeship Standard for Digital and Technology Solutions Professional. Against that context, the programme is then designed for professionals who provide technology enabled solutions to internal and/or external customers, in a range of areas including software, business and systems analysis, cyber security, data analysis and network infrastructure.

Distinguishing Features

- A combination of work-based modules that allows the degree apprentice to develop a range of technical competencies, transferable skills and attributes, which can be utilised to address real-life problems relevant to the business.
- Specific and tailored curriculum designed for different occupations as identified in the Apprenticeship Standard.
- The programme has been designed to be potentially delivered in different formats, such as campus attendance (“day release”) or flexible and distributed learning; delivery model can then be negotiated with the participating employers.

Admission Requirements

Under UK Government rules, Degree Apprentices must be employed for a minimum of 30 hours per week and must have the right to live and work in the UK (applies only in England). A Degree Apprentice cannot be self-employed. The employer must enter into an Apprenticeship Agreement with the apprenticeship student.

All candidates must be employed in a role related to the subject matter of the Degree Apprenticeship and be sponsored by their employer. Applications can only be made through the sponsoring employer. The University will consider all such applications and will have the final decision whether to accept the candidate for entry to the programme.

The recommended minimum entry requirements for Level 4 entry to the programme are:

- A -Levels or other equivalent Level 3 qualifications.
- English and Maths at Level 2.

Applications are welcomed from those with qualifications equivalent to the above, for instance from Access Certificate courses. Relevant or prior experience will be taken into account when considering a candidate's suitability for the programme. Where an applicant does not have the GCSE qualification the University will provide mechanisms to enable the apprentice to obtain Maths and English Level 2 qualifications.

Recognition of Prior Learning

The University APL procedures will be used to accredit prior APCL and APEL. Candidates who have completed a relevant Level 4 Apprenticeship could be considered for direct entry with advanced standing to Level 5 (or Year 2) stage of the Degree Apprenticeship. For example:

- A candidate with a Level 4 Apprenticeship: Software Developer would be considered for entry to Level 5 of the Software Engineer pathway within the Degree Apprenticeship;
- A candidate with a Level 4 Apprenticeship: Data Analyst would be considered for entry to Level 5 of the Data Analyst pathway within the Degree Apprenticeship.

Employability Statement / Career Prospects

On completion, the apprentice will have the knowledge, skills and occupational competence and professional attributes to enable them to be gainfully employed in one of the named roles specified under the Degree Apprenticeship Standard for Digital Technology and Solutions:

- Software Engineer
- Network Engineer
- Cyber Security Analyst
- IT Consultant
- Data Analyst
- Business Analyst

Other associated careers would include – software developer, software tester, application specialist, IT project manager, database specialist, digital media technology practitioner, systems designer.

Professional Statutory and Regulatory Body Accreditation

n/a

SECTION B: PROGRAMME AIMS, OUTCOMES, LEARNING, TEACHING AND ASSESSMENT METHODS

Programme Aims (linked to the standard)

The main educational aims of the programme are to:

- Give the degree apprentices the opportunity to gain experience in the workplace while earning a degree.
- Help the degree apprentices to grow practical technology expertise with project management, interpersonal and business skills.
- Support the degree apprentices in their development of core skills in the areas of information systems, systems development, data, cyber security, business organisation, IT project management, computer and network infrastructure.
- Allow degree apprentices to develop and apply core technical knowledge in the effective and secure implementation of information technology, processes and systems to support business activities and to bring value and benefits to the organisation.
- Develop degree apprentices into confident, competent and capable professionals, with a range of relevant attributes and behaviours, who can operate in a range of related roles including their chosen specialisation (Software Engineer, Network Engineer, Cyber Security Analyst, IT Consultant, Data Analyst, and Business Analyst).

Programme Learning Outcomes and Mapping to Modules

On successful completion of Level 6 BSc (Hons), a graduate will be able to:

K	Knowledge and Understanding	Core Modules (Code) Level 4	Core Modules (Code) Level 5	Core Modules (Code) Level 6
K1	Understand the business context and the role of the individual.	WB401 WB402	WB501 WB502 CO592	CO698 CO670 CO671 CO674 CO672
K2	Demonstrate knowledge of software, technology and systems for supporting different tasks and activities.	CO450 CO451 CO452 CO456 CO467 CO466 CO465	CO566 CO590 CO588 CO592	CO664 CO658 CO673
K3	Understand and model the interaction of users with technology as a basis for designing products and services to meet their needs.	CO455 CO457	CO540 CO557 CO562 CO592	CO698
K4	Describe and explain the integrated use of different technology components to support business processes.		CO550 CO587 CO590 CO588 CO592	CO650 CO659 CO654 CO655 CO669
K5	Understand the principles of planning, managing and delivering projects.		CO557 CO582 CO557 CO592	CO654 CO671 CO672
K6	Understand the security, legal and ethical dimensions of digital and technology solutions.		CO587 CO588 CO592	CO654 CO655 CO669 CO670 CO674
K7	Demonstrate advanced technical knowledge associated with digital and technology solutions.			CO650 CO664 CO659 CO658 CO654 CO655 CO669 CO673
K8*	Undertake research in order to extend own knowledge and understanding, and to plan and deliver projects.		CO582 CO557	CO698
C	Intellectual/Cognitive Skills	Core Modules (Code) Level 4	Core Modules (Code) Level 5	Core Modules (Code) Level 6

C1	Apply tools and methods to address the needs of simple tasks and problems.	CO450 CO452 CO451 CO456 CO464		
C2	Analyse and model activities, data, processes and requirements.	CO465 CO457 CO455	CO592 CO540	
C3	Evaluate a range of options in order to design and develop the appropriate digital technology solution to meet the needs of users and the business.		CO562 CO557 CO550 CO566 CO556 CO592	
C4	Effectively and securely manage, store, analyse and distribute data.	CO450 CO451 CO467 CO465	CO550 CO566 CO587 CO588 CO592	CO650 CO659 CO654 CO655 CO669 CO673 CO674
C5	Develop innovative solutions derived from effective research, critical assessment of the technologies available and a detailed assessment of the context or complex problem			CO698 CO650 CO659 CO654 CO655 CO669 CO673 CO674
C6	Recognise the challenges, motivations and benefits associated with implementing an innovation or new product within the business.	CO464 CO455	CO557 CO582 CO592 CO540	CO671 CO674 CO670 CO675 CO672
P	Practical Skills	Core Modules (Code) Level 4	Core Modules (Code) Level 5	Core Modules (Code) Level 6
P1	Make use of some software and technology for a limited range of defined activities.	CO450 CO451 CO452 CO456 CO457 CO467 CO466 CO465 CO455	CO540	
P2	Utilise a broad range of software and technologies for a variety of purposes.	CO465	CO556 CO550 CO566 CO590 CO592	

P3	Apply a range of specialist technology tools, making use of the advanced features and capabilities available, to address the needs of complex situations.			CO650 CO659 CO664 CO658 CO654 CO655 CO669 CO673 CO698
T	Key/Transferable Skills			
T1	Communicate effectively to different audiences and using different formats.	All Level 4 modules	All Level 5 modules	All Level 6 modules
T2	Take responsibility for the planning, managing and recording of their continuing learning and development.	WB401 WB402	WB501 WB502	CO698
T3	Make effective contributions to group work.		CO550 CO557 CO582	CO659 CO654 CO675 CO655
T4	Conduct themselves in a professional and confident manner when interacting with others.		Level 5 modules	Level 6 modules
T5*	Work independently, with limited guidance and supervision, to undertake significant tasks such as research and development projects.			Including CO698

Exit awards may be awarded where the full set of learning outcomes have not been achieved, as described below. Where the full award is not being given, this will result in non-completion of the apprenticeship.

On successful completion of a Level 6 BSc Ordinary Degree, graduates will have achieved the majority of the learning outcomes specified above for the full Honours award with the exception of those marked with a * (K8, T5).

The above learning outcomes will be demonstrated by the achievement of a combined total of 300 credits comprising 120 credits at Level 4, 120 credits at Level 5 and 60 credits at Level 6 from the following modules (excluding the dissertation or equivalent):

- **Software Engineer**
 - Level 4 – CO450, CO452, CO451, CO456, WB401, WB402
 - Level 5 – CO562, CO550, CO557, CO566, WB501, WB502
 - Level 6 – CO650, CO659, CO664, CO658
- **Network Engineer**
 - Level 4 – CO450, CO452, CO451, CO456, WB401, WB402
 - Level 5 – CO556, CO550, CO587, CO566, WB501, WB502
 - Level 6 – CO654, CO675, CO655, CO669
- **Cyber Security Analyst**
 - Level 4 – CO450, CO452, CO451, CO456, WB401, WB402
 - Level 5 – CO556, CO550, CO587, CO566, WB501, WB502
 - Level 6 – CO654, CO670, CO655, CO669

- **IT Consultant**
 - Level 4 – CO464, CO467, CO457, CO455, WB401, WB402
 - Level 5 – [CO567 or CO592], CO550, CO590, CO582, WB401, WB402
 - Level 6 – CO671, [CO670 or CO654], CO674, CO672
- **Data Analyst**
 - Level 4 – CO465, CO467, CO457, CO466, WB401, WB402
 - Level 5 – CO588, CO550, CO590, CO582, WB501, WB502
 - Level 6 – CO671, CO654, CO674, CO673
- **Business Analyst**
 - Level 4 – CO464, CO467, CO457, CO465, WB401, WB402
 - Level 5 – CO540, CO550, CO590, CO582, WB501, WB502
 - Level 6 – CO671, [CO670 or CO654], CO674, CO672

On successful completion of Level 5 DipHE, a graduate will be able to demonstrate achievement of the following learning outcomes:

- **K1.** Understand the business context and the role of the individual.
- **K2.** Demonstrate knowledge of software, technology and systems for supporting different tasks and activities.
- **K3.** Understand and model the interaction of users with technology as a basis for designing products and services to meet their needs.
- **K4.** Describe and explain the integrated use of different technology components to support business processes.
- **K5.** Understand the principles of planning, managing and delivering projects.
- **C1.** Apply tools and methods to address the needs of simple tasks and problems.
- **C2.** Analyse and model activities, data, processes and requirements.
- **C3.** Evaluate a range of options in order to design and develop the appropriate digital technology solution to meet the needs of users and the business.
- **C4.** Effectively and securely manage, store, analyse and distribute data.
- **P1.** Make use of some software and technology for a limited range of defined activities.
- **P2.** Utilise a broad range of software and technologies for a variety of purposes.
- **T1.** Communicate effectively to different audiences and using different formats.
- **T2.** Take responsibility for the planning, managing and recording of their continuing learning and development.
- **T3.** Make effective contributions to group work.

The above learning outcomes will be demonstrated by the achievement of a combined total of 240 credits comprising 120 credits at Level 4 and 120 credits at Level 5 for this programme.

On successful completion of Level 4 Cert HE, a graduate will be able to demonstrate achievement of the following learning outcomes:

- **K1.** Understand the business context and the role of the individual.
- **K2.** Demonstrate knowledge of software, technology and systems for supporting different tasks and activities.
- **K3.** Understand and model the interaction of users with technology as a basis for designing products and services to meet their needs.
- **C1.** Apply tools and methods to address the needs of simple tasks and problems.
- **C2.** Analyse and model activities, data, processes and requirements.
- **P1.** Make use of some software and technology for a limited range of defined activities.
- **T1.** Communicate effectively to different audiences and using different formats.

The above learning outcomes will be demonstrated by the achievement of 120 credits listed at Level 4 for this programme.

Learning, Teaching and Assessment Methods to achieve the Programme Learning Outcomes

The curriculum is based around the University's Work-Based Learning Framework, utilising a combination of: core subject modules, designed to give a platform for the development of technical and generic skills relevant for the named occupation (50% of the course); PPD modules created as vehicles to motivate the personal and professional development of the apprentice, through completion of work-based investigations and projects (33%); and, the Synoptic Project including the integrated End Point Assessment in Level 6 (17%).

There is an expectation that an apprentice will spend 20% of their time undertaking off-the-job training. This is broadly equivalent to one day per week for the duration of the course (36 calendar months). The format and schedule to support the delivery and supervision of all modules has then been established with this principle in mind. All modules are appropriately designated as being work-based learning modules although there will be some justified variation in the relative proportions of SLTA (Scheduled Learning and Teaching Activities), GIS (Guided Independent Study) and, of course, WBL (work-based learning) that aggregate to afford the 'notional learning hours' for a particular module. Some key features are summarised below:

- in addition to the WBL, SLTA and GIS, apprentices will be further supported by online materials and interactions with their tutors for the duration of the course.
- the core subject modules will be characterised by higher relative amounts of SLTA (24%); additionally, apprenticeship students will be expected to relate concepts, skills and other content covered in the modules to learning and development in their workplace context (WBL = 52%) and to undertake Guided Independent Study (GIS = 24%); there will be opportunities for using workplace scenarios, problems and case studies to complete activities and assignments.
- PPD modules will have a smaller relative proportion of SLTA (10%) to indicate the important inclusion of some supporting face-to-face workshops, tuition and supervision; these modules will allow apprenticeship students to extend upon and apply what they have learned in various modules and contexts by undertaking defined activities in their workplace to further progress their learning and development; WBL will constitute at least 80% of the notional learning hours in these cases.
- within the Synoptic Project, the apprentice will undertake a significant work-based project under the guidance of an academic supervisor and a workplace mentor; regular reviews, meetings and communications will help to keep the apprenticeship student on track with their work alongside some group briefings, workshops and tutorials, together making up the SLTA (10%); the remaining notional learning hours are based upon GIS (10%) and WBL (80%).

The Apprenticeship programme, as well as its Programme Learning Outcomes, is based upon the requirements of the relevant Standard for Digital and Technology Solutions Professional, which specifies the skills, knowledge and behaviours that the apprentice should acquire across the Degree programme, including the associated learning, development and application in the workplace. The apprentice's learning journey is then supported and progressed by an appropriately designed curriculum and a complementary assessment approach across the programme. Early modules (Level 4) introduce awareness about technology, its importance and utilisation in the business context, and allow the apprentice to establish foundational skills. Knowledge and skills continue to build through the Level 5 and Level 6 stages of the programme as the apprentice gains more experience in the workplace and can better use and apply their knowledge and skills, leading to further improvements in their professional competence.

The level and person development associated with a module is additionally benchmarked against the SFIA (Skills Framework for the Information Age), a model for describing competency and responsibility levels of ICT and digital professionals. Thus, a Level 4 module has a strong emphasis on knowledge and comprehension relevant to the occupation or discipline, corresponding to the SFIA capabilities of 'FOLLOW' and 'ASSIST'; such that the apprentice is heavily reliant on the structured advice and guidance from the tutor and workplace mentor, and has a restricted perspective. A Level 5 module is characterised by the evaluation of problems and scenarios, and the application of an apprentice's knowledge and skills to design, define, develop and implement technical solutions; this reflects the SFIA capabilities of 'APPLY' and 'ENABLE', such that the apprentice is beginning to contextualise their learning, recognise the inter-relationships between different modules, and work effectively with others to solve problems. A Level 6 module extends the apprenticeship student further to employ synthesis

and evaluation when making critical judgements that underpin the creation of innovative solutions to complex problems, moving through the domains of 'ENABLE', 'ENSURE' and 'ADVISE' in terms of SFIA competencies. The apprentice should now have acquired a good range of interpersonal skills, including professional and confident communication, being able to work independently and collaboratively to interrogate and complete diverse and challenging projects. They can also take significant responsibility for directing and managing their own personal development.

A range of assessments are used on the programme, including different written assignments, practical activities, exams, presentations and projects. The level of difficulty will increase as the apprentice moves from Level 4 to Level 5 to Level 6, reflecting the parallel progression in their learning, development and competency. Furthermore, the apprentice and the workplace mentor can provide organisational contexts for the completion of assignments, so the apprentice can apply knowledge and practice skills from the curriculum to work-related problems and projects.

There is a general approach adopted for the delivery of those strongly technical modules that have a relatively high reliance on SLTA. Core material about topics will tend to be delivered by a lecture or presentation. A demonstration is then often used as an introduction to some practical activity or problem solving exercise, which encourages 'learning by doing' where apprenticeship students can review and reinforce their understanding of topics, working either individually or as part of a group. The tutor will monitor and supervise apprenticeship students, providing guidance, assistance and encouragement as and when required. Tutor feedback to apprenticeship students about their progress, learning and development is not confined to formal pieces of summative assessment, where marks, grades and comments are provided; it is rather seen as a fundamental part of an ongoing dialogue between the tutor and the apprenticeship students, where regular reviews and discussions focus on areas of relative strength and weakness, leading into suggestions about how improvements can be achieved. Within this context, apprenticeship students get to appreciate the importance of taking responsibility for their own learning and development, and making use of feedback.

The regular face-to-face sessions will be further supported by additional virtual content and online digital materials. A virtual learning environment (VLE) will support and guide the learning and development of the apprenticeship student when they are away from the classroom. The tutor will make use of the VLE to provide tuition and supervision to the apprenticeship students, and maintain good interaction and communication with and between the apprenticeship students throughout the module.

Apprenticeship students will be encouraged to keep a logbook or notebook that documents their work and provides a record of what they have done and learned. Keeping a good set of notes, developed with supporting reading and research, is viewed as an important element of the learning process and does provide reference material that can be used to complete tasks, projects and other coursework, including preparation for review meetings and tests. Apprenticeship students are expected to participate and engage fully with the module, with guided learning and independent learning being necessary extensions to the face-to-face and online tuition provided.

PPD modules will have distributed but linked activities, with staged assessment points. Modules WB401 and WB501 will allow apprenticeship students to - reflect upon their learning needs, establish and maintain a personal development plan and record of achievements, and, develop research skills and realise effective work-based learning by undertaking an action inquiry project (collated within a larger, course-long portfolio). Modules WB402 and WB502 allow apprenticeship students to - produce a reflective report relating to the importance of information systems in the workplace, and, analyse the development, performance and contribution of the individual in the context of organisational behaviour and working relationships.

Modules should not be viewed as isolated units of learning but rather as a collection of inter-related modules that work together to support the holistic development of the apprentice, in and out of their workplace.

Work-Based Learning

Work-based learning (WBL) modules will allow the apprentice to apply and extend upon the knowledge and skills covered in Scheduled Teaching and Learning Activities (SLTA) when undertaking activities

and projects in their place of work. These modules will also provide a vehicle for the apprentice to take responsibility for planning, achieving and recording their personal and professional development.

The principles for WBL are:

- Emphasis on learning that takes place in the workplace rather than in educational institutions.
- It is intrinsically different from mainstream higher education and for some is more demanding than more traditional didactic learning.
- The nature of learning at work moves the focus of responsibility firmly into the hands of the learner.
- Individual learners are required not only to take responsibility for identifying their learning needs and aspirations but also for managing the learning process.

WBL has the following characteristics:

- Management through a three-way partnership between the HEI, employee and employer.
- Programmes and curricula derived from the needs of the workplace and the learner, as well as the subject itself as outlined in the standard.
- Delivery in part in the workplace.
- Assessment by both workplace assessors and HEI.

The Synoptic Project and End Point Assessment

Within the Synoptic Project (CO698), and in line with the relevant Apprenticeship Standard, the apprenticeship student is required to undertake a substantial work-based project that demonstrates effective development and application of their knowledge, skills and behaviours as highlighted in the Apprenticeship Standard. The project should relate to one of the specialisms in the Standard (for example, Software Engineer, Network Engineer, Cyber Security Analyst, IT Consultant, Data Analyst, Business Analyst). It will be based upon a real business problem, with the scope and expectations agreed between the apprentice, the employer and the university tutor.

The Synoptic Project has two summative assessment elements, assessment of the PROJECT and assessment of the PRESENTATION. The apprentice also has to submit (as a PASS/FAIL component) a collated PORTFOLIO that evidences their learning and development across the course. Taken together, these three elements represent the integrated END POINT ASSESSMENT, which must be successfully negotiated to pass the Degree programme and the Apprenticeship.

SECTION C: PROGRAMME STRUCTURE(S) AND HOURS

Table 1: Programme Structure Table

Programme Title	BSc (Hons) Digital and Technology Solutions								
Apprenticeship Standard	Digital and Technology Solutions Professional								
Course Code	BB1DTS2								
Mode of Study	Work-Based Learning								
Credit Value	UK	360			ECTS	180			
Module Code	Module Title	QCF/FHEQ Level	Course Stage / Year	Status in Award (<i>Core / Optional</i>)	Credit Value	Assessment Regime			
						Written Exam %	Coursework %	Practical %	
Pathway/Occupation – SOFTWARE ENGINEER									
Level 4									
CO450 WBL	Computer Architectures	4	1	C	15	100	0	0	
CO452 WBL	Programming Concepts	4	1	C	15	0	100	0	
CO451 WBL	Networking	4	1	C	15	100	0	0	
CO456 WBL	Web Development	4	1	C	15	0	100	0	
WB401	Investigating Work-based Learning and Self-Review	4	1	C	30	0	100	0	
WB402	Understanding Reflective Practice & Enquiry based Learning	4	1	C	30	0	100	0	
Level 5									
CO567 WBL	Object Oriented Systems Development	5	2	C	15	20	80	0	
CO550 WBL	Web Applications	5	2	C	15	0	100	0	
CO557 WBL	Software Engineering	5	2	C	15	0	100	0	
CO566 WBL	Mobile Systems	5	2	C	15	0	100	0	
WB501	Action Inquiry in the Workplace Context	5	2	C	30	0	100	0	
WB502	Organisation Skills and Behaviours	5	2	C	30	0	100	0	
Level 6									
CO650 WBL	Advanced Programming	6	3	C	15	0	100	0	

CO659 WBL	Enterprise Systems Development	6	3	C	15	30	70	0
CO664 WBL	Design Patterns	6	3	C	15	0	100	0
CO658 WBL	Data Structures & Algorithms	6	3	C	15	0	100	0
CO698 WBL	Synoptic Project	6	3	C	60	0	100	0
Pathway/Occupation – NETWORK ENGINEER								
Level 4								
CO450 WBL	Computer Architectures	4	1	C	15	100	0	0
CO452 WBL	Programming Concepts	4	1	C	15	0	100	0
CO451 WBL	Networking	4	1	C	15	100	0	0
CO456 WBL	Web Development	4	1	C	15	0	100	0
WB401	Investigating Work-based Learning and Self-Review	4	1	C	30	0	100	0
WB402	Understanding Reflective Practice & Enquiry based Learning	4	1	C	30	0	100	0
Level 5								
CO556 WBL	Network Systems	5	2	C	15	100	0	0
CO550 WBL	Web Applications	5	2	C	15	0	100	0
CO587 WBL	Information Security Management	5	2	C	15	0	0	100
CO566 WBL	Mobile Systems	5	2	C	15	0	100	0
WB501	Action Inquiry in the Workplace Context	5	2	C	30	0	100	0
WB502	Organisation Skills and Behaviours	5	2	C	30	0	100	0
Level 6								
CO654 WBL	Cloud Computing	6	3	C	15	0	100	0
CO675 WBL	Project Management	6	3	C	15	0	100	0
CO655 WBL	Network Security	6	3	C	15	0	100	0
CO669 WBL	Security Auditing and Response	6	3	C	15	0	100	0
CO698	Synoptic Project	6	3	C	60	0	100	0
Pathway/Occupation – CYBER SECURITY ANALYST								
Level 4								
CO450 WBL	Computer Architectures	4	1	C	15	100	0	0
CO452 WBL	Programming Concepts	4	1	C	15	0	100	0

CO451 WBL	Networking	4	1	C	15	100	0	0
CO456 WBL	Web Development	4	1	C	15	0	100	0
WB401	Investigating Work-based Learning and Self-Review	4	1	C	30	0	100	0
WB402	Understanding Reflective Practice & Enquiry based Learning	4	1	C	30	0	100	0
Level 5								
CO556 WBL	Network Systems	5	2	C	15	100	0	0
CO550 WBL	Web Applications	5	2	C	15	0	100	0
CO587 WBL	Information Security Management	5	2	C	15	0	0	100
CO566 WBL	Mobile Systems	5	2	C	15	0	100	0
WB501	Action Inquiry in the Workplace Context	5	2	C	30	0	100	0
WB502	Organisation Skills and Behaviours	5	2	C	30	0	100	0
Level 6								
CO654 WBL	Cloud Computing	6	3	C	15	0	100	0
CO670 WBL	Business Continuity Management	6	3	C	15	0	100	0
CO655 WBL	Network Security	6	3	C	15	0	100	0
CO669 WBL	Security Auditing and Response	6	3	C	15	0	100	0
CO698 WBL	Synoptic Project	6	3	C	60	0	100	0
Pathway/Occupation – IT CONSULTANT								
Level 4								
CO464 WBL	Business Analysis	4	1	C	15	0	100	0
CO467 WBL	Database Design	4	1	C	15	100	0	0
CO457 WBL	Business Modelling	4	1	C	15	0	100	0
CO455 WBL	User Experience	4	1	C	15	30	70	0
WB401	Investigating Work-based Learning and Self-Review	4	1	C	30	0	100	0
WB402	Understanding Reflective Practice & Enquiry based Learning	4	1	C	30	0	100	0
Level 5								
CO567 WBL	Object Oriented Systems Development	5	2	O	15	20	80	0
CO592 WBL	IT Services Management	5	2	O	15	50	50	0
CO550 WBL	Web Applications	5	2	C	15	0	100	0

CO590 WBL	Networking	5	2	C	15	100	0	0
CO582 WBL	Project Management	5	2	C	15	0	100	0
WB501	Action Inquiry in the Workplace Context	5	2	C	30	0	100	0
WB502	Organisation Skills and Behaviours	5	2	C	30	0	100	0
Level 6								
CO671 WBL	Change Management	6	3	C	15	0	100	0
CO670 WBL	Business Continuity Management	6	3	O	15	0	100	0
CO654 WBL	Cloud Computing	6	3	O	15	0	100	0
CO674 WBL	Legal Aspects of IT	6	3	C	15	0	100	0
CO672 WBL	Benefits Management and Measurement	6	3	C	15	0	100	0
CO698 WBL	Synoptic Project	6	3	C	60	0	100	0
Pathway/Occupation – DATA ANALYST								
Level 4								
CO465 WBL	Business Intelligence	4	1	C	15	0	100	0
CO467 WBL	Database Design	4	1	C	15	100	0	0
CO457 WBL	Business Modelling	4	1	C	15	0	100	0
CO466 WBL	Data Warehousing	4	1	C	15	0	100	0
WB401	Investigating Work-based Learning and Self-Review	4	1	C	30	0	100	0
WB402	Understanding Reflective Practice & Enquiry based Learning	4	1	C	30	0	100	0
Level 5								
CO588 WBL	Big Data	5	2	C	15	0	100	0
CO550 WBL	Web Applications	5	2	C	15	0	100	0
CO590 WBL	Networking	5	2	C	15	100	0	0
CO582 WBL	Project Management	5	2	C	15	0	100	0
WB501	Action Inquiry in the Workplace Context	5	2	C	30	0	100	0
WB502	Organisation Skills and Behaviours	5	2	C	30	0	100	0
Level 6								
CO671 WBL	Change Management	6	3	C	15	0	100	0
CO654 WBL	Cloud Computing	6	3	C	15	0	100	0

CO674 WBL	Legal Aspects of IT	6	3	C	15	0	100	0
CO673 WBL	Data Science	6	3	C	15	0	100	0
CO698 WBL	Synoptic Project	6	3	C	60	0	80	20
Pathway/Occupation – BUSINESS ANALYST								
Level 4								
CO464 WBL	Business Analysis	4	1	C	15	0	100	0
CO467 WBL	Database Design	4	1	C	15	100	0	0
CO457 WBL	Business Modelling	4	1	C	15	0	100	0
CO465 WBL	Business Intelligence	4	1	C	15	0	100	0
WB401	Investigating Work-based Learning and Self-Review	4	1	C	30	0	100	0
WB402	Understanding Reflective Practice & Enquiry based Learning	4	1	C	30	0	100	0
Level 5								
CO540 WBL	User Experience	5	2	C	15	30	70	0
CO550 WBL	Web Applications	5	2	C	15	0	100	0
CO590 WBL	Networking	5	2	C	15	100	0	0
CO582 WBL	Project Management	5	2	C	15	0	100	0
WB501	Action Inquiry in the Workplace Context	5	2	C	30	0	100	0
WB502	Organisation Skills and Behaviours	5	2	C	30	0	100	0
Level 6								
CO671 WBL	Change Management	6	3	C	15	0	100	0
CO670 WBL	Business Continuity Management	6	3	O	15	0	100	0
CO654 WBL	Cloud Computing	6	3	O	15	0	100	0
CO674 WBL	Legal Aspects of IT	6	3	C	15	0	100	0
CO672 WBL	Benefits Management and Measurement	6	3	C	15	0	100	0
CO698 WBL	Synoptic Project	6	3	C	60	0	100	0

Table 3: Breakdown of Contact Hours

Note: Hours are worked on the basis of full-time study. 1 Academic Credit is equated to 10 notional learning hours. An undergraduate student will normally study 120 credits in an academic year which is therefore equated to 1200 notional hours. A full time postgraduate student will normally study 180 credits in an academic year which equates to 1800 hours. Module Descriptors provide detailed breakdowns of the categories given below.

Year of course	Scheduled Learning and Teaching Activities	Work based learning	Guided Independent Study	Total
Year One	204	822	174	1200
Year Two	204	792	204	1200
Year Three	204	792	204	1200
Total	612	2406	582	3600

SECTION D: ASSESSMENT REGULATIONS

This programme complies with the approved University regulations *University Academic Framework and Assessment Regulations* and procedures as detailed on the University website.

The following modules will be non-compensable:

- CO698 Synoptic Project.

The calculation of this award will be [Level 5 x 33%] x [Level 6 x 67%].

Exit Awards Available

Exit Award Type	Award Title	Credits Achieved
Certificate of Higher Education	Digital and Technology Solutions	120 Credits
Diploma of Higher Education	Digital and Technology Solutions	240 Credits
Ordinary Degree	Digital and Technology Solutions	300 Credits

Note: Where exit awards are made, this would result in non-completion of the apprenticeship.

SECTION E: FURTHER INFORMATION

Reference Points

The following reference points were used when designing the programme:

- Trailblazer Standard – Degree Apprenticeship Standard for Digital and Technology Solutions Professional
- University Strategy 2016-2021
- Buckinghamshire New University Approval of Academic Provision policy and procedure
- QAA Subject Benchmark Statement for: Computing
- QAA Framework for Higher Education Qualifications (2014)
- PSRB documents – Tech Partnership accreditation documents and guidance; regular participation in their Apprenticeship Standard Steering Group where university programmes are reviewed and accredited, and emerging standards are discussed
- Work-based and Placement Learning Policy
- University Academic Qualifications Framework

- Consultation with training organisations already delivering L3 and L4 apprenticeships to get recommendations and feedback about structure, content and delivery model (e.g. Digital Native and Outsource Training).

Annual Review and Monitoring

This programme will be monitored annually through the University's formal processes, which involves a continual cycle of review and enhancement. This process is supported by both the periodic review of subject areas and the periodic re-approval process for individual programmes. All processes are completed in consultation with students via the Students' Union or student representatives.

The re-approval of this programme is scheduled for academic year: 2022-23.

APPENDICES

Appendix 1 – Mapping of Programme Learning Outcomes, Modules and QAA Subject Benchmark for Computing (2016)

Appendix 2 – Mapping of Modules against Apprenticeship Standard

Appendix 3 – Mapping of Programme Learning Outcomes against Apprenticeship Standard

© 2017 Buckinghamshire New University