

## Template C4



# Programme Specification

**Title of Course:** *BSc (Hons) Digital and Technology Solutions*

<b>Date first produced</b>	06/08/2023
<b>Date last revised</b>	18/07/2023
<b>Date of implementation of current version</b>	31/05/2023
<b>Version number</b>	1
<b>Faculty</b>	Faculty of Engineering, Computing and the Environment
<b>School</b>	School of Computer Science and Mathematics
<b>Department</b>	Department of Computer Science
<b>Delivery Institution</b>	

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

## SECTION 1: GENERAL INFORMATION

<b>Award(s) and Title(s):</b> <i>Up to 10 pathways</i>	BSc (Hons) Digital and Technology Solutions
<b>Intermediate Awards(s) and Title(s):</b> <i>There are 4 Intermediate awards for each pathway</i>	BSc (Hons) Digital and Technology Solutions BSc (Hons) Digital and Technology Solutions BSc (Hons) Digital and Technology Solutions
<b>Course Code</b> <i>For each pathway and mode of delivery</i>	
<b>UCAS code</b> <i>For each pathway</i>	n/a

<b>FHEQ Level for the Final Award:</b>	
<b>Awarding Institution:</b>	Kingston University
<b>Teaching Institution:</b>	
<b>Location:</b>	Partner Institution
<b>Language of Delivery:</b>	English
<b>Modes of Delivery:</b>	Distance Learning
<b>Available as:</b>	
<b>Minimum period of registration:</b>	Distance Learning -
<b>Maximum period of registration:</b>	Distance Learning -
<b>Entry Requirements:</b>	GCSE Maths and English + normally, a L3 qualification. Applicants required to successfully complete an virtual assessment centre exercise to assess their suitability. (Sova assessment)
<b>Programme Accredited by:</b>	n/a
<b>QAA Subject Benchmark Statements:</b>	computing (2022, QAA)
<b>Approved Variants:</b>	n/a
<b>Is this Higher or Degree Apprenticeship course?</b>	

### *For Higher or Degree Apprenticeship proposals only*

<b>Higher or Degree</b>	Digital and Technology Solutions Professional Degree Apprenticeship Standard V1.2 (2023, IfATE)
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<b>Apprenticeship standard:</b>	
<b>Recruitment, Selection and Admission process:</b>	Applicants will need to be nominated by an employer or be recruited by an employer having undertaken Corndel's suitability assessment. Student must meet standard ESFA eligibility requirements and undertake skills radar (prior learning assessment) prior to enrolment. In most cases prior learning is not expected to lead to RP(E)L and will instead be accounted for in the funding draw down.
<b>End Point Assessment Organisation(s):</b>	Kingston university

## **SECTION 2: THE COURSE**

### **A. Aims of the Course**

The BSc (Hons) Digital & Technology Solutions aims to:

- Provide a dynamic and practical learning environment to enable learners to acquire and apply digital & technical solutions skills to real world contexts and situations
- Provide a foundational understanding of digital & technical solutions and the role of key functions including data analysis, management of digital and technology projects, development of data software solutions and an understanding of systems and infrastructure to achieve strategic organisational aims
- Provide students with knowledge, skills and behaviours to enable engagement with current digital and technology issues and challenges through a lens of ethics, sustainability, and responsibility.

### **B. Intended Learning Outcomes**

The course outcomes are referenced to the relevant QAA subject benchmarks indicated, the digital technology solutions professional degree apprenticeship standard and the Frameworks for Higher Education Qualifications of UK Degree Awarding Bodies (2014) And relate to the typical student. The course provides opportunities for students to develop and demonstrate knowledge and understanding specific to the subject, key skills and graduate attributes in the following areas:

<b>Programme Learning Outcomes</b>					
	<b>Knowledge and Understanding</b>		<b>Intellectual Skills</b>		<b>Subject Practical Skills</b>
	On completion of the course students will be able to:		On completion of the course students will be able to		On completion of the course students will be able to
A1	Critically reflect upon issues, concepts, theories and perspectives relevant to the subject, developing & evaluating complex arguments	B1	Critically evaluate and employ theories and skills and techniques to achieve practical outcomes in real-world contexts / scenarios	C1	Critically evaluate and employ professional and ethical working practices, acting in the best interest of the organisation
A2	Critique and employ a wide range of discipline-specific theories, concepts and skills	B2	Employ a range of ideas that inform evidence-based decision making within.	C2	Apply collaboration processes to facilitate effective working relationships, share ideas and address complex challenges for mutual benefit
A3	Employ a range of digital tools to solve complex problems and support excellent communication.	B3	Communicate arguments and reasoning effectively, with a good understanding of audience and purpose.	C3	Critically evaluate political, social and environmental issues related to professional contexts.
A4	Create and implement solutions to complex problems, using a range of problem-solving tools and techniques.				

In addition to the programme learning outcomes identified overleaf, the programme of study defined in this programme specification will allow students to develop a range of Key Skills as follows:

<b>Key Skills</b>						
<b>Self-Awareness Skills</b>	<b>Communication Skills</b>	<b>Interpersonal Skills</b>	<b>Research and information Literacy Skills</b>	<b>Numeracy Skills</b>	<b>Management &amp; Leadership Skills</b>	<b>Creativity and Problem Solving Skills</b>
Take responsibility for own learning and plan for and record own personal development	Synthesise information to express ideas clearly in writing and the spoken word to diverse and multiple audiences	Work well with others in a group or team	Identify and use effective ways to search and validate information	Handle and understand numbers as required for context	Seek opportunities to initiate and determine the scope of a task/project	View problems from a diverse range of perspectives to find solutions
Recognise own academic strengths and weaknesses, reflect on performance and progress and respond to feedback	Present, challenge and defend ideas effectively	Work flexibly and respond to change	Critically evaluate information and use it appropriately	Summarise and visualise numerical data	Seek opportunities to identify and secure resources needed to undertake the task/project; efficiently schedule and manage the resources	Seek opportunities to address global and long-term challenges
Organise self effectively, agreeing and setting realistic targets, accessing support where appropriate and managing time to achieve targets	Actively listen to ideas of others in an unbiased way	Discuss and debate with others and make concession to reach agreement	Apply the ethical requirements in both the access and use of information	Navigate, interact and contribute effectively, safely and legally with various digital platforms, including the web	Seek opportunities to set the direction, successfully complete and evaluate a task/project, revising the plan where necessary	Imagine, create and exploit solutions and more abstract ideas, including experimentation and risk-taking
Work effectively without supervision in unfamiliar contexts		Give, accept and respond to constructive feedback	Comply with legal requirements in both the access and use of information	Use personal and professional digital tools and environments	Seek opportunities to motivate and direct others to enable an effective contribution from all diverse participants	Work with complex ideas and problems, making evidence-based recommendations
		Show sensitivity and respect for diverse values and beliefs	Accurately cite and reference information Sources	Use technologies to effectively communicate and collaborate across dispersed/global teams.		Enterprise skills (ability to anticipate, identify, and grasp opportunities)

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## C. Outline Programme Structure

Level 4 Data Fundamentals 30 Credits Developing Data Projects 30 Credits Managing Technology Projects 30 Credits Sustainable Technology Solutions 30 Credits  
 Level 5 Secure Systems and Infrastructure 30 Credits Data Solutions Architecture 30 Credits Data Informed Solutions 30 Credits  
 Level 6 Collaborative Professional Development 30 Credits Research Ethics 30 Credits Data Analysis Project 30 Credits Project Report 30 Credits 30 Credits Using & Presenting Business Intelligence

Full details of each module will be provided in module descriptors and student module guides. Level 4 (all core) Core modules Module code Credit Value Level Data Fundamentals DT401 30 4 Developing Data Projects DT402 30 4 Managing Technology Projects DT403 30 4 Sustainable Technology Solutions DT404 30 4

Students exiting the course at this point who have successfully completed 120 credits at level 4 or above are eligible for the award of Certificate of Higher Education Digital & Technology Solutions

Level 5 (all core) This course permits progression from level 4 to level 5 with 90 credits at level 4 or above. Core modules Module code Credit Value Level Secure Systems and Infrastructure DT501 30 5 Data Solutions Architecture DT502 30 5 Using and presenting Business Intelligence DT503 30 5 Data Informed Solutions DT504 30 5 This course permits progression from level 5 to level 6 with 90 credits at level 5 or above. Students exiting the programme at this point who have successfully completed 120 credits at level 5 or above are eligible for the award of Diploma of Higher Education in Digital & Technology Solutions

Level 6 Core modules Module code Credit Value Level Collaborative Professional Development DT601 30 6 Research Ethics DT602 30 6 Data Analysis Project DT603 30 6 Project Report DT604 30 6 Level 6 requires the completion of the modules

## BSc (Hons) Digital and Technology Solutions

Level 4							
BSc (Hons) Digital and Technology Solutions							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Data Fundamentals	DT401	30	4	1 & 2		1	
Developing Data Projects	DT402	30	4	1 & 2		1	
Managing Technology Projects	DT403	30	4	1 & 2		1	
Sustainable Technology Solutions	DT404	30	4	1 & 2		1	
<b>Optional Modules</b>							

Progression to Level 5



This course permits progression from level 4 to level 5 with 90 credits at level 4 or above.

<b>Level 5</b>							
<b>BSc (Hons) Digital and Technology Solutions</b>							
<b>Core modules</b>	<b>Module code</b>	<b>Credit Value</b>	<b>Level</b>	<b>Teaching Block</b>	<b>Pre-requisites</b>	<b>Full Time</b>	<b>Part Time</b>
Data Informed Solutions	DT504	30	5	1 & 2		2	
Data Solutions Architecture	DT502	30	5	1 & 2		2	
Secure Systems and Infrastructure	DT501	30	5	1 & 2		2	
Using and presenting Business Intelligence	DT503	30	5	1 & 2		2	
<b>Optional Modules</b>							

Progression to Level 6

This course permits progression from level 5 to level 6 with 90 credits at level 5 or above.

<b>Level 6</b>							
<b>BSc (Hons) Digital and Technology Solutions</b>							
<b>Core modules</b>	<b>Module code</b>	<b>Credit Value</b>	<b>Level</b>	<b>Teaching Block</b>	<b>Pre-requisites</b>	<b>Full Time</b>	<b>Part Time</b>
Collaborative Professional Development	DT601	30	6	1 & 2		3	
Data Analysis Project	DT603	30	6	1 & 2		3	
Project Report	DT604	30	6	1 & 2		3	
Research Ethics	DT602	30	6	1 & 2		3	
<b>Optional Modules</b>							

Level 6 requires the completion of

Level 6 requires the completion of the modules

Level 7 information

n/a

#### **D. Principles of Teaching, Learning and Assessment**

The BSc (Hons) Digital & Technology Solutions programme provides an innovative and dynamic learning environment for students to enable both flexibility through asynchronous activities and facilitated learning support in the synchronous learning activities. It combines academic learning with a level 6 Digital & Technical Solutions Professional degree apprenticeship. The programme is structured over 12 modules each covering a 10 week teaching and assessment block. Principles of teaching, Learning, Assessment and Support is provided below: Asynchronous e-learning materials and lectures Asynchronous learning activities for each module accessed flexibly on-demand: o e-Learning lessons: these weekly activities provide specialist content for each module including theory, models, tools and techniques. It incorporates regular activities and exercises applied to the learner's working environment that help AQSH: Template C4 2022-23 Page 12 of 17 to build practical understanding and provide evidence for the building of the apprenticeship portfolio. o Module Challenge: at the beginning of each module learners will be provided with a 'module challenge' that builds into an assignment submitted at the end of the block. o Lectures: there will be three per module and these provide an opportunity to introduce key features of a module, to deepen knowledge of a particular aspect of the module and to support assessment preparation for the Module Challenge. Synchronous Workshops, Peer Learning Activity and Academic and Professional Skills Synchronous learning activities for each module scheduled in advance for interactive learning: o Facilitated specialist workshops: these support the development of understanding of the specialist content in groups that run three times for each module (1-1.5 hours per session). o Academic and professional skills sessions: these provide specific skills that are tailored to each module to develop skills for specific activities and for the assessment. For example a session could include an activity such as: Advanced Excel spreadsheet skills, academic writing and referencing, data management dependent on the particular module (1 hour per session). Additionally, all students are provided with frequent one-to-one business coaching throughout the programme. Module Challenges and Authentic Assessment The Course aims for each assessment where possible to reflect an 'authentic' business experience, providing opportunities for learners to build skills and experience that are valuable in the workplace. The initial challenge set at the beginning of each module will lead to an assessment that is submitted at the end of the teaching and learning block for that module. Examples of authentic assessment could include: o An in-depth personal analysis and reflection on practice, identifying key areas for personal development as a digital & technical solutions professional, with the creation of a dynamic Personal Development Plan that will be reviewed throughout the programme AQSH: Template C4 2022-23 Page 13 of 17 o A business presentation on a sustainable technology proposal that is recorded and uploaded, based on a structured preparation process that is supported by a list of references used to ensure content is both informative and accurate o Researching and writing of a journalistic article that provides insight and multiple perspectives on a current and contemporary issue that has relevance to their organisation and/or industry o Assessment portfolio, demonstrating the development of appropriate software artefacts, relevant to the needs of the business.

## **E. Support for Students and their Learning**

Corndel Students are supported by: • Their Professional Development Expert (PDE). The cornerstone of Corndel's personalised delivery model, each learner is allocated to a PDE who they meet frequently. The PDE supports learners to contextualise their learning within their role, providing formative feedback to support threshold and stretch attainment, and acting as the first port of call for a broad range of student support requirements. Students will develop an individual learning plan with their PDE which is regularly updated and progress evaluated against. • Students will have access to Corndel's extensive online learning materials via the virtual learning environment, including access to e-book versions of texts within module reading lists and access to journal collections. • PDEs also signpost additional

learning and support via Corndel's support for skills and Qwell who support student mental health and wellbeing.

## **F. Ensuring and Enhancing the Quality of the Course**

The University has several methods for evaluating and improving the quality and standards of its provision. These include: • External examiners • Boards of study with student representation • Annual Monitoring and Enhancement • Continuous Monitoring of courses through the Kingston Course Enhancement Programme (KCEP+) AQSH: Template C4 2022-23 Page 14 of 17 • Student evaluation including Module Evaluation Questionnaires (MEQs), level surveys and the National Student Survey (NSS) • Moderation policies • Feedback from employers

## **G. Employability and work-based learning**

As a degree apprenticeship, the work-based learning is a core component of the course, supplementing directed online and independent study. Work-based learning allows students to contextualise and apply theoretical concepts in the workplace and explore the relationship between theory and practice. Students must be in relevant employment in order to enrol on the award and must maintain relevant employment throughout their studies. Students will be encouraged to use their experience within the workplace to support the completion of formative and summative assessment. They will also have the opportunity, through their regular 1:1 meetings with their PDE to explore workplace changes, relating them back to theory and receiving advice and guidance as appropriate.

### ***Work-based learning, including sandwich courses and higher or degree apprenticeships***

The student's PDE will be the key liaison between the student, Corndel and the Employer and leads regular (as determined by Education and Skills Funding Agency guidance) tripartite reviews of students' progress to ensure work-based setting is effectively supporting learning and to ensure employers understand the needs of their employee on the course. In order to achieve the apprenticeship students must complete both the requirements of the degree (passing the modules) and complete the end point assessment required by the Institute for Apprenticeships and Technical Education.

## **H. Other sources of information that you may wish to consult**

BSc (Hons) Digital & Technology Solutions Programme Handbook Digital and Technology Solutions Degree Apprenticeship standard (V.1.2) - <https://www.instituteforapprenticeships.org/>

## **I. Development of Course Learning Outcomes in Modules**

This table maps where course learning outcomes are **summatively** assessed across the modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code		Level 4				Level 5				Level 6			
		DT401	DT402	DT403	DT404	DT501	DT502	DT503	DT504	DT601	DT602	DT603	DT604
Knowledge & Understanding	A1	S	S	S	S	S	S	S	S	S	S	S	S
	A2		S	S	S	S	S	S			S	S	
	A3	S					S	S	S		S	S	S
	A4		S	S	S	S	S	S	S	S		S	
Intellectual Skills	B1			S		S	S	S				S	
	B2				S		S				S		
	B3			S				S	S	S	S		S
Practical Skills	C1							S	S			S	S
	C2									S	S	S	
	C3				S					S	S		

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.