



# BSc (Hons) Digital & Technology Solutions (Business Analysis) (Degree Apprenticeship)

## **Programme Handbook**

Published February 2020 Version 3



## **Introduction to the Programme**

Welcome to the BSc (Hons) in Digital & Technology Solutions (Business Analysis) (Degree Apprenticeship) programme handbook. This handbook provides you with information about the structure of your programme and a description of each of the modules that you will study.

The programme is made up of the modules listed below. An outline of the content of each of the modules and the assessment methods used can be found in the Module Definition Forms.

## **BSc (Hons) Digital & Technology Solutions (Business Analysis)**

## Level 4

Module Code	Module Title	Credits	Module Type (Core/Route)
	Professional Development	20	Core
	Computer Systems Security	20	Core
	Information Systems in Organisations	20	Core
	Information Security Deployment	20	Route
	IT Governance	20	Route
	Risk and Incident Management	20	Route

## Level 5

Module Code	Module Title	Credits	Module Type (Core/Route)
	Systems Analysis and Design	20	Core
	Programming	20	Core
	Database Design and Implementation	20	Core
	Data Communications	20	Core
	Organisational Analysis	20	Route
	Business Modelling	20	Route

## Level 6

Module Code	Module Title	Credits	Module Type (Core/Route)
	Emerging Technology	20	Core
	Business Organisations	20	Core
	Project Management and Strategy	20	Core

Enterprise Architecture	20	Route
Computing Project	40	Core

Please note that modules may not be delivered in this order; please refer to your course timetable.

Alongside these modules, students will complete the requirements of the apprenticeship and will benefit from workplace coaching and development days to ensure that they achieve all the Knowledge, Skills, and Behaviours that are required.

After completing the degree and when all of the apprenticeship requirements have been completed, and with the agreement of Arden University and the apprentice's employer, the apprentice will go through gateway and will be entered for the End Point Assessment. The End Point Assessment requires the presentation of a work-based project and a professional discussion. If successful, the apprentice will then receive the apprenticeship qualification.

#### ARDEN UNIVERSITY QUALITY ASSURANCE DOCUMENT QA3 - PROGRAMME SPECIFICATION

1. Target Award	BSc (Hons)
2. Programme Title	BSc (Hons) Digital and Technology Solutions (Business Analysis)
3. Exit Awards	BSc Digital and Technology Solutions (Business Analysis) (300
	credits)
	Diploma of Higher Education Digital and Technology Solutions
	(Business Analysis) (240 Credits)
	Certificate of Higher Education Digital and Technology Solutions
	(120 Credits)
4. Programme Leader(s)	Tim Robson
5. Delivery Model Restrictions	Apprenticeship – with work-based learning
	Online P/T
	PT/FT campus based delivered at approved delivery centres
6. Start date	October 2018
7. Programme Accredited by	
(PSRB or other, if applicable)	
8. UCAS Code (If applicable)	
9. Relevant QAA subject	QAA Benchmarks for Batchelors Degrees in Computing (2016),
benchmark statement	I260 (Data Management)

## 10. Programme Aims

The primary aim of the BSc (Hons) Digital and Technology Solutions (Business Analysis) (Degree Apprenticeship) programme is to provide an apprenticeship route to enable students to gain a broad understanding of computing, and related topics, and to develop their practical and intellectual skills in relation to the deployment of technology in the workplace.

The core aims to provide generic computing and business knowledge and skills including the fundamentals of databases, programming, security and systems analysis and design. The programme will also equip students with knowledge and skills related to business analysis, designing requirements specifications and evaluating the outcomes of analysis activities.

In particular, the purpose of the programme is to provide participants with:

- An ability to analyse systems development and deployment needs within organisations and apply agreed standards and tools.
- A critical and applied understanding of the fundamentals and application of database design solutions.
- An ability to analyse risks associated with cyber security and propose applied resolutions.
- To critically analyse and apply organisational and project management theory in practical situations to delivery technology solutions to generate competitive advantage
- To evaluate core networking theory and apply it effectively
- A critical appreciation of requirements elicitation and modelling to support requirements specification design and testing
- An ability to evaluate analysis outcomes against objectives using industry standard tools

The programme provides for the opportunity for applicants to gain exemptions against modules based on their previous certificated learning on comparable programmes. In addition, Accreditation of Prior Experiential Learning will also be considered for exemptions on the apprenticeship route only.

**Arden Values Mapping**: the table below identifies how programme outcomes (listed within section 11) meet provide for full coverage of Arden University Values.

	_	Intellectual Thinking		Transferable Skills
We Support People	A3	B2		D5
We Do The Right Thing	A4	B2	C3	
We Innovate	A1, A2, A5	В3	C1, C2, C3	
We Take Ownership	A1, A2, A3	B2	C1, C2, C5	D6, D8

	ning outcomes and the means by v	vhich they are achieved and			
demonstrated					
BSc (Hons) 360 credits					
11a. Knowledge and	The means by which these	The means by which these			
understanding	outcomes are achieved	outcomes are demonstrated			
A1 – Critically understand the	Learning and Teaching methods	Knowledge and understanding are			
value of technology	and strategy:	assessed through in-module			
investment, how to formulate		assessments of portfolio			
a business case and generate	Apprenticeship – All apprentices	submissions, presentations, time-			
competitive advantages	will be enrolled on modules that	constrained examinations, report-			
	will have a variable amount of	based assignments and for the			
A2 – Understand how to	face to face contact alongside	apprenticeship route through			
design, develop and test	online learning. All of the	practical activities that evidence			
software to agreed standards	knowledge criteria will be	the achievement of these core			
	delivered via this method and	aims.			
A3 – Analyse the strategic	will make use of the approaches				
process and roles related to	developed in the delivery of	Formative assessments are the			
technology in an organisation	distance and blended learning	precursor to the summative			
and how teams function	provision as well as support	assessments. Appropriate and			
	offered in additional contact	diverse formative assessments are			
A4 – Evaluate the role of data	sessions.	provided for students and are			
management ethics, and		communicated to them via a clear			
security in a technology	Acquisition of knowledge and	overview to be found in the			
context	understanding in a distance	assessment brief for each module.			
	learning context (A1 – A8) at all				
A5 – Analyse approaches to	levels is through an integrated				
project management and	learning and teaching pedagogy				
delivery including associated	that includes both asynchronous				
constraints with an	and synchronous activity. That				
understanding of business	is:				
needs.	A surredo no no no				
	Asynchronous				
	Independent and directed				
	student study, supported				

A6 – Demonstrate how to analyse requirement and then online multi-media teaching use requirements engineering methods to generate solutions

A7 – Analyse appropriate tools and models to assess the impact of business analysis techniques

A8 – Demonstrate a critical understanding of a specified Digital and Technology solutions issue explored via an Podcasts and narrated extended project

throughout by comprehensive materials and resources accessed through our VLE Guided group / project-based work.

Discussion forums where students discuss and critically engage with themes emerging from the materials they engage with, following the posing of questions or propositions, case studies or similar by either tutor or students themselves PowerPoint's

Synchronous Online seminars facilitated by VOIP's where theory and practice are integrated. Live chats

Blended delivery is facilitated by a combination of synchronous face to face classroom-based delivery and Asynchronous Independent and directed student study, supported throughout by comprehensive online multi-media teaching materials and resources accessed through our VLE Based upon the profile of our typical student body, our strategy enables students to engage with a variety of learning tools that best meet their learning styles, overall objectives and personal circumstances. Independent study is the cornerstone of the learner experience supported by engagement with the specialist tutor and peer engagement. There is a requirement for written work at all levels including reports, essays, practical tasks, developed targeted plans etc., and our

	formative assessment policy	
	informs how feedback is supplied	
	by tutors at the draft assessment	
	phase.	
11b. Intellectual (thinking)	The means by which these	The means by which these
skills	outcomes are achieved	outcomes are demonstrated
B1 - Engage in critical thinking	Intellectual skills (B1 – B4) are	Intellectual skills are assessed
and be able to accurately	developed throughout the	through a combination of in-course
identify issues and formulate	programme by the methods and	formative exercises and summative
an articulate response in	strategies outlined in section A,	assignments, including the
given contexts. This will	above. Intellectual development	
include the selection and use	(B3 & B4) is further encouraged	reflective evidence, statistical
of information from a variety	via formative assessment tasks	analyses, qualitative judgements,
of sources, discerning	including set briefs, in-module	and research reports/dissertation.
between assumptions and	activities, case studies, self-	' '
evidence.	initiated briefs, and discussion	
	with tutors and peers (in online	
B2 - Apply theoretical	forums/debates).	
concepts and practical	,	
techniques to problem solving	Specific modules support the	
, , ,	development of quantitative and	
to generate solutions to	qualitative analysis, and the	
digital and technology	development of criticality and	
problems	self-reflective skills. In addition,	
'	the student's thinking skills will	
B3 – Analyse and interpret	be evident in a summative	
quantitative and qualitative	assessment process which	
data to extrapolate important	requires and rewards learners	
	for the demonstration of creative	
to reach a conclusion based	thinking and problem solving,	
upon logic and evidence.	analysis, judgement and self-	
' "	reflection in the development of	
B4 - Generalise appropriately	contextually relevant solutions,	
to utilise judgement to draw	and a willingness to explore and	
appropriate conclusions and	engage with a range of media.	
make recommendations from		
one context to another.	Throughout, the learner is	
	encouraged to develop	
	intellectual skills further by	
	undertaking further independent	
	study and research.	
11c. Practical skills	The means by which these	The means by which these
	outcomes are achieved	outcomes are demonstrated
C1 – Critically analyse	Practical and professional skills	To support the development of
business needs and generate	(C1-C8) are employed in the	practical skills students must supply
information systems and	production of solutions to real	worked materials and evidence in
-	life situations developed through	
meet needs.	set briefs, exercises and practical	• •
	activities. In the case of	good presentation and sound
C2 – Identify data needs and	apprentices, these are developed	I
	specifically in the workplace and	_
	,	- 1-1

them including ongoing the assessments target the assessment briefs are targeted database tasks. development of solutions to real towards creating solutions in their problems. The important own workplaces. For other deliver C3 – Analyse and apply modern-day skills of managing modes, assessment briefs include a methods to assess security projects, working within differing variety of commercial and organisational and national geographical contextual setting. All risks and mitigate against them. cultures are provided by specific students receive feedback on all modules, as are specific inputs activities and assignments which C4 – Apply effective project with an emphasis upon practical includes practical examples for management and functional decision-making skills improvement in the application of theory to practice to help them organisational change related to digital and technology strategies. solutions management; improve both aspects of their skill managing others; and managing base. C5 – Effectively implement knowledge. networking solutions Practical skills are further developed and integrated C6 – Analyse business requirements and then through a series of in-course develop requirements online activities and projects specifications based on the intended to test skills acquired. outcomes of appropriate Group forums provide modelling techniques opportunities to discuss ideas, progress, the work of others and C7 – Evaluate solutions using the strengths and weakness in appropriate tools and models the work presented. Activities to demonstrate added value are provided so that students can work independently to C8 – Carry out extended consolidate their knowledge and research into an identified grasp of practical skills. Digital and Technology solutions issue demonstrating a critical approach to research and generating appropriate recommendations 11c. Transferrable skills The means by which these The means by which these outcomes are achieved outcomes are demonstrated D1 - Critically reflect to (D1-D8) Personal responsibility To develop transferable skills all support enhanced learning, becomes an increasingly assignments must meet time self-awareness and important skill as students deadlines and word count interaction with others Progress, culminating in the guidelines. All assessed work must writing of the Dissertation. be submitted independently even D2 - Identify and critically where group activity has been an analyse issues in order to As the programme progresses element of the process. Students generate contextually work becomes more complex must take responsibility for their relevant and workable and students are tested on their own work. All assignments require solutions. abilities to respond positively to students to adopt a spirit of critical

feedback from a variety of

audiences, as well as to manage

increasingly large workloads.

Students are required to complete a number of

D3 - Undertake effective

communication and

presentation skills

enquiry and self-reflection which is

rewarded in marking guides. These

guides are shared with students.

D4 - Effectively use CIT to assignments and a 'research communicate and in a variety artefact that rewards of settings independence originality, and critical enquiry, and which further enhance communication D5 - Work effectively as a and self-reflective skills. member of a team, including leadership and team working skills, and cross-cultural awareness D6 - Work independently and to take responsibility for own learning D7 - Undertake multidisciplinary research through the acquisition of skills relevant to the context of management D8 - Effectively plan and undertake personal development including the awareness of an ethical and socially responsibly dimension to decision making

## **Exit Awards: Programme Outcomes**

	Knowledge & Understanding	Intellectual Skills		Transferrable Skills
Ordinary Degree (300 credits)	A1-A7	B1-B4	C1-C7	D1 – D8
Graduate Diploma (240 credits)	A1, A2, A3, A4	B1 – B4	C1, C2, C3	D1 – D8
Graduate Certificate (120 credits)	A1-A3	B1, B2	C1-C3	D1-D4

## 12. Graduate Attributes and the means by which they are achieved and demonstrated Graduate Attributes

The concept of the Arden University Graduate, based upon the definition of 'graduate attribute' by Bowden et al (2000) has been developed around 6 attributes.

**Lifelong Learning:** Manage employability, utilising the skills of personal development and planning in different contexts to contribute to society and the workplace.

**Reflective Practitioner:** Undertake critical analysis and reach reasoned and evidenced decisions, contribute problem-solving skills to find and innovate in solutions

**Professional Skills:** Perform effectively within the professional environment. Work within a team, demonstrating interpersonal skills such as effective listening, negotiating, persuading and presentation. Be flexible and adaptable to changes within the professional environment

**Discipline Expertise:** Knowledge and understanding of chosen field. Possess a range of skills to operate within this sector, have a keen awareness of current developments in working practice being well positioned to respond to change.

**Responsible Global Citizenship:** Understand global issues and their place in a globalised economy, ethical decision-making and accountability. Adopt self-awareness, openness and sensitivity to diversity in culture.

**Effective Communication:** Communicate effectively both, verbally and in writing, using a range of media widely used in relevant professional context. Be IT, digitally and information literate.

**Discipline Expertise**: Knowledge and understanding of chosen field. Possess a range of skills to operate within this sector, have a keen awareness of current developments in working practice being well positioned to respond to change

## The means by which these outcomes are achieved and demonstrated

All six attributes are relevant to this programme and will be developed throughout the BSc (Hons) Digital & Technology Solutions (Business Analysis) award where they are integrated into all modules and assessed via unit study tasks (individual and group work) and through summative assessment tasks.

## Mapping

Module	Graduate Attribute
Professional Development	Lifelong Learning: Manage employability, utilising the
Computing Project	skills of personal development and planning in different
Data Communications	contexts to contribute to society and the workplace.
Database Design and Implementation	Reflective Practitioner: Undertake critical analysis and
Emerging Technology	reach reasoned and evidenced decisions, contribute
	problem-solving skills to find and innovate in solutions
Risk and Incident Management	Professional Skills: Perform effectively within the
Organisational Analysis	professional environment. Work within a team,
Business Modelling	demonstrating interpersonal skills such as effective
Enterprise Architecture	listening, negotiating, persuading and presentation. Be
	flexible and adaptable to changes within the professional
	environment.
Information Systems in Organisations	Responsible Global Citizenship: Understand global issues
Computer Systems Security	and their place in a globalised economy, ethical decision-
IT Governance	making and accountability. Adopt self-awareness,
	openness and sensitivity to diversity in culture.
Systems Analysis and Design	Effective Communication: Communicate effectively both,
Information Security Deployment	verbally and in writing, using a range of media widely
	used in relevant professional context. Be IT, digitally and
	information literate.
Business Organisation	Discipline Expertise: Knowledge and understanding of
Project Management and Strategy	chosen field. Possess a range of skills to operate within

Programming	this sector, have a keen awareness of current
	developments in working practice being well positioned
	to respond to change

## 13. Learning and teaching methods and strategies

## Apprenticeship

Much of the apprenticeship programme will be studied via 'ilearn' (VLE), however it will also include 20% structured 'off-the-job' training, prior to the end-point assessment, this will help develop competences within an occupation. 'Off-the-job' training is defined as learning which is undertaken outside the normal day-to-day working environment and contributes towards the achievement of the apprenticeship. Although this can include training that is delivered at the apprentice's normal place of work, it must not be delivered as part of their normal working duties. The 'off-the-job' training must be directly relevant to the apprenticeship. The bulk of the delivery approach will reflect that used in distance and blended learning which is detailed below.

### Distance Learning

Acquisition of programme outcomes is via engagement with the online module learning material and the online tutoring and programme participant support mechanisms, both of which are delivered via Arden University's ilearn platform (a Moodle-based system). The learning material comprises purpose-written self-contained lessons with frequent activities and feedback to generate learning and reinforce the knowledge acquisition through frequent application of learning to specific examples.

Embedded within the text are links to further reading and appropriate websites. Feedback within the learning material is provided to allow programme participants to check their understanding with that of the tutor. Additionally, group learning activities direct programme participants to the tutor-facilitated discussion forums where they engage in discussion with their peers and receive formative feedback from the module tutor.

Each of the 20 credit modules provide programme participants with an understanding of key theoretical and practical management issues, debates and academic informed literatures.

Teaching/learning methods adopted are transferrable across modules and are similar across modules and include online class discussions, exercises/case studies and group discussions.

For each subject being taught a programme of structured online learning activities using both formative and summative assessment is applied. The emphasis is on action learning through the mediation of the module leader for each module.

Learning and Teaching activities are:

#### Asynchronous

Independent and directed student study, supported throughout by comprehensive online multimedia teaching materials and resources accesses through our Virtual Learning Environment Guided group / project-based work Research tasks

Discussion forums where students discuss and critically engage with themes emerging from the online materials they engage with, following the posing of questions or propositions, case studies or similar by either tutor or students themselves

Podcasts and narrated PowerPoints

## Synchronous

Online seminars facilitated by VOIP's (voice over internet protocol) where theory and practice are integrated

Live chats

Based upon the profile of our typical student body, our strategy enables students to engage with a variety of learning tools that best meet their learning styles, overall objectives and personal circumstances. Independent study is the cornerstone of the learner experience, supported by subject specialist engagement with the tutor and peer engagement.

#### **Blended Learning**

A strategy which incorporates elements from the above criteria plus the support of face to face input will be utilised.

Asynchronous learning will be supported by in class face to face lectures, seminars and workshops. Students will have full access to the 'ilearn' platform (VLE) and all programme resources within it. Formative opportunities will be available in class and also via forum / e mail feedback.

Student leaning will be supported and nurtured at our partner institutions by our tutor team and dedicated centre administrator and online via our student support team.

Summative submissions will all be made via the 'Turn it In' platform.

#### 14. Assessment methods and strategies

The assessment process involves both formative and summative elements and is continuing in nature.

There will be a focus on encouraging students to apply their knowledge to practical situations within their own workplaces. A significant part of this comes from the Dissertation module. Here students will be required to identify a topic of interest to them, which falls within the specified route that they are following. Students will explore this, and will apply their research to the topic, putting forward recommendations which are of practical benefit to the organisation.

The approach to coursework assignments will be to encourage students to apply their knowledge to their own organisation, adding value whilst they learn.

The assessment designed for each module reflects the intentions of that module and will measure the identified learning outcomes. A variety of assessment strategies will be used to reflect and test the achievement of the learning outcomes. These are detailed within each module and mapped in the table below. Assessment questions and cases are seen to be dynamic and are reviewed quarterly in order to maintain rigour and reflect changes in professional focus and practice.

There is a requirement for written work at all levels including reports, essays, developed plans, portfolios of work etc. supplemented by other approaches as identified in the apprenticeship standard assessment guide. Our assessment policy informs how feedback is supplied by tutors at the formative and summative assessment stage. Critical analysis is encouraged at all levels culminating in a final project.

## In addition, for apprenticeship students only

Skills and behaviours will be observed and assessed within the workplace throughout the duration of the programme and an end point assessment associated with the apprenticeship process.

The end point assessment is constituted of:

Project showcase, based on work-based project, including report, presentation and questioning

Professional discussion based on review of portfolio. In addition, students will be assessed on various skills and competencies within the workplace

## 15. Employability

Entrants to this programme on an apprenticeship route must be employed and due to the nature of the content and assessment, should the programmes be used as distance or blended learning products, it would be advantageous for the student to be employed in a relevant field. The Digital and Technology Solutions programme is designed to offer the degree of flexibility required to ensure that all students have the maximum opportunity to fulfil their programme of study. The programme aims to develop skills, behaviours and knowledge such that graduates can confidently enter the project management environment or can improve their existing career prospects within it. The degree develops a range of transferrable skills and provides opportunities for these to be evidenced. In particular the final dissertation provides the ability to demonstrate higher level academic skills.

Arden values are imbedded within the programme as a whole and these values will be instilled in students as they progress through their studies, thus ensuring that graduating students are fully equipped with highly current, appropriate and ethically sound knowledge, procedures and processes.

The addition of imbedded graduate attributes adds value to the qualification in terms of providing 'industry ready' graduating students.

## 16. Entry Requirements

- Two Subjects at GCE A level or equivalent, plus passes at grade C or above in three subjects, including Maths and English at GCSE level or equivalent; or
- Completion of a recognised Access Programme or equivalent.
- IELTS 6.0 or equivalent for students whose medium of prior learning was not English.
- Evidence of eligibility for funding
- Written employer support and evidence of appropriate employment

Exemption may be offered to students where they are able to demonstrate alignment of modules studied to those on the programme offered at Arden University. The specialist nature of the modules makes it unlikely that a large number of exemptions will be given on any route and as such there is no specified option to apply for direct entry to a top up qualification based on possession of

an appropriate qualification at level 5. In addition to this APCL route, Applicants who possess work related experience may be able to gain module exemptions through demonstration of prior experiential learning via an APEL process. Each case will be considered on its own merits and sufficient evidence will have to be provided to demonstrate competence equivalent to the outcomes of any given module.

			Module Type
Module Code	Module Title	Credits	(Core/Route)
	Professional Development	20	С
	Computer Systems Security	20	С
	Information Systems in Organisations	20	С
	Information Security Deployment	20	R
	IT Governance	20	R
	Risk and Incident Management	20	R
evel 5		•	
			Module Type
Module Code	Module Title	Credits	(Core/Route)
	Systems Analysis and Design	20	С
	Programming	20	С
	Database Design and Implementation	20	С
	Data Communications	20	С
	Organisational Analysis	20	R
	Business Modelling	20	R
evel 6			·
			Module Type
Module Code	Module Title	Credits	(Core/Route)
	Emerging Technology	20	С
	Business Organisations	20	С
	Project Management and Strategy	20	С
	Enterprise Architecture	20	R
	Computing Project	40	С

**Annex –** Mapping of Intended Programme Learning Outcomes and Modules

M	Programme Learning Outcomes odules	A1	A2	А3	A4	A5	A6	A7	A8	B1	B2	В3	B4	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7	D8
Level 4	Professional Development	Х	Х							Х												Х		х					Х
	Computer Systems Security				Х											Х						Х							
	Information Systems in Organisations	Х		Х							Х		Х	Х									Х						
	Information Security Deployment		Х		Х			Х		Х		Х				Х			Х							Х			
	IT Governance	Χ									Х					Х												Χ	
	Risk and Incident Management				х		Х	Х					х			Х			Х	Х		Х							
Level 5	Systems Analysis and Design	Х		х							Х		Х	Х									х						
	Programming		Х							Х		Χ			Х												Χ		
	Database Design and Implementation				Х							Х			Х								х		Х				
	Data Communications				Х					Х						Х		Х								Х		Χ	
	Organisational Analysis	Х		Х		Х	Х	Х			Х			Х					Х	Х			Х						
	Business Modelling	Χ				Х	Х	Х				Х	Х	Х					Χ	Х			Х		Х				
Level 6	Emerging Technology	Χ		Х						Х	Х			Х									Х				Х		

Business Organisations	Х		Х								Х		Х								
Project Management and Strategy		х	х							Х			Х								
Enterprise Architecture	Х	Х	Х	Х	Х		Х	Х			Х		Х	Х	Х		Х	х			
Computing Project						Х	Χ	Χ	Χ	Χ						Χ				Χ	Χ