Digital Health & Care
Innovation Centre

Digital Health and Care Education and Training Provision in Moray

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DHI supports innovation between academia, the public and
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1 - Introduction

This report presents a current snapshot of education and training provision in the Moray region that is relevant to the digital health and care sector.

These courses include a variety of subjects such as:
- Computing/ICT;
- Health/Medicine;
- Social Care;
- Design; and
- Business/Management/Leadership/Innovation.

The information contained in this paper was collated from previous desk research carried out by the DHI Research & Knowledge Management team and discussions with local stakeholders in Moray, including the Skills Steering Group who support the skills and workforce development activities taking place in the region.

It is intended that this baseline report identifies the starting point for the skills and workforce development activities underpinning the Rural Centre of Excellence for digital health and care innovation programme (RCE)[1], and acts as a benchmark against which future progress can be assessed or comparisons made.

2 - Background

The Rural Centre of Excellence for digital health and care in the Moray region

The Moray Growth Deal is a regional investment in eight strategic projects to boost economic growth across Moray. It is a long-term plan to address concerns around encouraging young people to live and work in the area and gender inequalities in employment.

The RCE is a key project of the Moray Growth Deal, housing a state-of-the-art demonstration and simulation environment and an enabling cloud infrastructure. With a £5 million UK Government investment, the RCE will support the remobilisation of health and care services and the economic recovery of the Moray region, through investment in research and innovation activities, aligned to the digital health and care agenda. Health and Social Care Moray are working in partnership with the DHI to achieve this.

All the activities associated with the RCE will be person-centred and deliver real-world evidence to enable innovative digital solutions to be embedded in local services, and potentially scaled to other parts of Scotland, the rest of the UK and globally.

DHI is working collaboratively with the people who live and work in Moray in order to build a picture of the system from a local perspective. This asset-based approach seeks to highlight the strengths, capacity and knowledge of all those involved.

3 - Education Providers

The main education providers in the Moray region are UHI Moray and the University of the Highlands and Islands (UHI). These institutions offer flexible and supported learning at a range of levels, from National Qualifications to PhD. The following sections explore the educational offers from UHI Moray and UHI that are relevant to the digital health and care sector.

UHI Moray
UHI Moray is a partner college of UHI. It was established in 1971 and has two main sites in Elgin and a number of local learning centres located in Buckie, Elgin and Forres. UHI Moray offers courses from National Qualifications (NQs), Higher National Certificates (HNCs) and Higher National Diplomas (HNDs), to undergraduate degrees, Masters and Professional Development Awards (PDAs).

SCQF level 7 and 8 Courses
Whilst there are jobs that require specific qualifications, skills and competence levels are of equal importance. The Scottish Credit and Qualifications Framework (SCQF) Partnership works with a wide range of awarding bodies, professional bodies and other programme owners across Scotland, to extend the recognition of informal and non-formal learning. Appendix A details the mainstream Scottish qualifications in the context of the Framework, but broadly, SCQF levels 7 and 8 are equivalent to HNC/D and PDAs.

[1] dhi-scotland.com/projects/rce-moray/

Table 1 illustrates the range of SCQF level 7 and 8 offered at UHI Moray that are relevant to the digital health and care sector.

Course Title	Further Information	Digital Health/ Care Content
HNC Social Services	A one-year full-time course (2 years to complete the part-time course) delivered through a combination of face-to-face lectures and online study via the university's virtual learning environment (VLE).	Telehealth care response is provided as an optional unit.
HNC Computing	A broad-based course introducing aspects of software development, technical support, networking and web development.	None
HND Computer Science	This course develops competency in a wide range of related skills such as design and implementation of applications including: programming using recognised commercial languages; database design; website design and support; mobile application development; and cyber resilience.	None
NC Level 6 Computing with Digital Media	This course offers the opportunity to develop knowledge in areas such as computer hardware & networking, academic writing, projects and website development.	None
HNC/D Digital Design & Web Development	This qualification enables students to develop a wide range of transferable skills in a number of key disciplines including, graphic design, 2D animation, web design, application and games development, audio/video production, and programming.	None
HNC Healthcare Practice	The course has been designed to meet the needs of different paramedical and health care providers. On completion students can pursue a career in a health-related profession or pre-registration nurse education. They can also progress to the BA (Hons) Health and Social Studies.	None
HNC/D Business	Delivers a wide range of business and management skills including marketing; economics; emerging technologies; IT; communication; accounting and management.	None
HNC Fitness Health and Exercise	This course introduces students to the fundamental principles of training and science; the interdisciplinary nature of fitness and exercise; and how to involve individuals in their own fitness and health.	None
HNC/D Technologies in Business	HNC modules may include: cyber resilience; Big Data' business process management; and introduction to software development. HND modules may include: business culture and strategy; database server administration; object-oriented programming' relational database management systems; and social media for business.	None
PDA Technology Enabled Care	This course has been designed and developed to support Scotland's National Digital Health and Care Strategy and workforce education around technology enabled care. It would be of interest to those who are new to technology enabled care, as well as those who have experience within the field. It is specifically designed to enable students to develop or advance their knowledge, skills and abilities in this ever-changing field of practice.	Both SCQF level 7 units

Table 1: SCQF Levels 7 and 8 courses relevant to digital health and care

Senior Phase Programme for Secondary Schools

UHI Moray has developed a Senior Phase Programme (in partnership with Moray Council Education Department) to enable school pupils to experience college life and explore a wider range of subjects than might be accessible at school. Pupils in S4, 5 and 6 can study one day a week at college whilst continuing with their normal school classes the rest of the time. They can access National Progression Awards (NPAs), National 5 or Higher qualifications, or even Higher National (HN) units.

Foundation Apprenticeships (FAs) are also available through the school's programme in Moray. The FA in Social Services and Healthcare qualification helps candidates to prepare for a wide range of different care roles, such as adult or children's nurse; care assistant; care home manager; residential support worker; or social worker (Appendix B outlines the current provision of apprenticeships in Scotland).

NPAs are vocational qualifications based on a defined set of skills and knowledge in specialist areas and linked to National Occupational Standards. They are aimed at young learners and designed to introduce them to a subject and stimulate their interest in it, supporting a pipeline to further study.

NPAs have been growing in popularity in recent years and can be delivered by both schools and colleges (with greater scope for innovation and flexibility than Highers). A number of data science focused NPAs have been developed by the Scottish Qualifications Authority (introduced in 2019) and are now on offer in the Moray region, as shown in Table 2.

Course Title	Further Information	Digital Health/ Care Content
NPA: Cyber Security	SCQF Level 5. The course covers data security; digital forensics; and ethical hacking.	None
NPA: Professional Computer Fundamentals	SCQF Level 6. The course covers computer networks (including network hardware and network services and protocols); security; server concepts; and server storage solutions.	None
National 5/ Higher Computing Science	The National 5 qualification comprises software design and development; computer systems; database design & development; and web design & development. The Higher qualification is made up of 2 main units: software design & development; and information system design & development.	None

Table 2: SCQF Levels 4, 5, 6[2] courses relevant to digital health and care

University of the Highlands and Islands

University of the Highlands and Islands (UHI) is an integrated university encompassing both further and higher education undergraduate courses. Tables 3 and 4 highlight the SCQF Levels 9 -11 available to study at UHI relevant to the digital health and care sector.

Course Title	Further Information	Digital Health/ Care Content
BSc (Hons) Applied Software Development	In their final year, students work on a single product, looking at project and technical considerations including business planning and finding investors.	None
BSc (Hons) Computing	Core modules include: advanced databases; designing web-based applications; team project or work placement industry-specific skills.	None
BA (Hons) Health and Social Studies	An entirely online course focussing on topical health issues including sociology, psychology, public health, rural health issues, health care ethics and the integration of health and social care.	Including CPD award Digital Futures in Health and Social Care - SCQF Level 9 (20 credits)

Course Title	Further Information	Digital Health/ Care Content
BSc Hons) Integrative Healthcare	Years 1 and 2 are blend of face-to-face and online, but years 3 and 4 are entirely online. It is the only course of its kind in Scotland and is delivered from UHI Moray and has been developed in consultation with industry to closely reflect the changing requirements of the healthcare sector in the UK and abroad.	Health informatics
BA (Hons) Business and Management	The programme offers flexibility for students to develop specific knowledge and expertise in key business areas such as: marketing; enterprise; human resources management; and finance.	None
BSc (Hons) Sport and Fitness	This is a diverse sport and fitness qualification with a focus on practical application of skills	None

Table 3: SCQF Levels 9 and 10[3] (undergraduate) courses relevant to digital health and care

Course Title	Further Information	Digital Health/ Care Content
MSc Applied Data Analytics	Delivered on both part-time and full-time basis: the part-time course is delivered online, and the full-time course is delivered on campus at UHI Inverness.	Although there is no specific digital health/care content, there are many opportunities for the students to use health/care data within their assessments.
MA Health and Wellbeing	A part-time online course open to undergraduate or postgraduate students in a health or social care-related discipline (eg, public health, nursing, medicine, health education, health improvement). Option modules include Digital health and social care.	Including CPD award Digital Health and Social Care - SCQF Level 11 (20 credits)
PgCert Health Leadership and Management	A part-time, online course designed specifically for supervisors, managers, aspiring managers and senior executives working in the health service. Course modules include: • Leading the contemporary workforce • Collaborative leadership • Information decision making	None
MSc Infection Prevention and Control	A part-time online course promoting and developing best practice in the field of infection prevention and control. This is a pressing issue for professionals and the community as a whole and IPC practitioners must be equipped to respond appropriately.	Includes option module in Digital Health and Social Care - SCQF Level 11 (20 credits)
BSc (Hons.) Optometry	This programme is delivered in Inverness with a blend of face to face and online. There is growing demand for optometrists, highly skilled healthcare professionals, trained to examine the eyes to detect defects in vision, signs of injury, ocular diseases or abnormalities. Through this innovative, interactive degree, students develop the knowledge and skills they need to work as an optometrist and, importantly, continually adapt to the challenges faced in delivering eye-care provision in today's health care environment	None

[3] *See Appendix A for comparable qualifications on the SCQF diagram.*

MSc Oral Health Science	This programme is delivered in Inverness with a blend of face-to-face and online. This leading degree in Oral Health Science offers prospective students (including school leavers, qualified dental nurses, and those who are considering a career change) the opportunity to train for a structured professional career in dental hygiene and dental therapy; a sector currently experiencing a shortage in skilled practitioners.	None
MBA Business Administration (Resilience)	This course is part of a brand new suite of MBAs, designed to provide leadership and management skills across the areas of Aviation, Environment, Executive and Resilience. This course embraces innovation, entrepreneurship and technology, and is based on 4 underlying pillars and key values: Ethical awareness Cultural readiness Future readiness Identifying growth and opportunity	None
MBA Business Administration (Executive)	As above	None

Table 4: SCQF Level 11[4] (postgraduate) courses relevant to digital health and care

In addition, UHI began running an upskilling module "Getting Started with R for Data Analytics" in January 2023. This SCQF level 8 module is delivered online and whilst is currently uses a variety of datasets to suit a general market this could be easily customised to incorporate more specific industry content, such as digital health and care.

Glasgow School of Art

The Glasgow School of Art (GSA) Innovation School is a leading centre for design teaching that explores the role of design as a catalyst for positive change, and investigate its potential impact on people and places. The Innovation School's Highlands and Islands campus is based near Forres and is a centre for research and postgraduate study, with learning opportunities being supported by digital and remote teaching methods.

Course Title	Further Information	Digital Health/ Care Content
MDes Design Innovation & Transformation Design	This course provides opportunities to explore new forms of design in relation to public participation, social and technological innovation and policy-making.	Students have the opportunity to engage with healthcare organisations (including the NHS) and explore methodologies for institutional change.
MDes Design Innovation & Interaction Design	This programme promotes a hands-on approach to interaction design. Through live projects with an emphasis on collaborative working, students develop an understanding of Interaction Design in complex environments and learn to analyse behaviours that inform the design process.	Students frequently engage with stakeholders who have complex health and socials care needs, through service providers and third sector organisations.

[4] See Appendix A for comparable qualifications on the SCQF diagram.

MDes Design Innovation and Environmental Design	Aims to identify opportunities for change and innovation through the application of design methodologies and thinking, to use design practice as a means to understand and explore the human and material factors that shape an environment.	Students explore how places and spaces affect the wellbeing of people and communities.
MDes Design Innovation and Circular Economy	This programme focusses on the key ecological and social design aspects of the circular economy	None
MDes Design Innovation and Future Heritage	This programme aims to develop critical engagement with, and a working knowledge of, heritage debates, history, environmental issues, and societal concern;	None

Table 5: Design courses relevant to digital health and care

It should be noted that there are a wider number of digital health and care courses delivered by the GSA Innovation School at a national level, including medical visualisation, design for health and wellbeing, and innovation and change. These are outlined in Appendix C.

Future developments delivered by the GSA will include Continuous Professional Development (CPD) short courses in Innovation, such as 'Exploring Innovation', 'Innovation & Circular Economy', 'Innovation and Food Futures', and 'Health & Wellbeing Innovation'.   These will likely be fully funded in the first instance, and carry 10 credits at level 11.

GSA are also supporting a new level 5 and 6 qualification in Creative Thinking that includes Health & Wellbeing content and resources developed with Daydream Believers. The qualification will be taught in schools (supported by the Open Studio team), and there are also plans to develop school teacher CPD in this space.

4 - Vocational courses

Whilst there is no prescribed list of mandatory social care courses in Scotland, UHI Moray offers a range of vocational courses covering best practice in health and social care settings as illustrated in Table 6.

Course Title	Further Information	Digital Health/ Care Content
SVQ Care Services Leadership and Management (SCQF level 10)	Multiple units are studied including 4 core units: Manage and develop yourself and your workforce within care services; Lead and manage practice that promotes safeguarding of individuals; Lead and manage practice for health and safety in work setting; Lead and manage effective communication systems and practice.	None
SVQ Social Services and Healthcare (SCQF level 6)	This course is aimed at people who are support workers in care services for adults.	None
SVQ Social Services and Healthcare (SCQF level 7)	This SVQ is suitable for individuals who are currently in employment and who wish to obtain a formal qualification and/or people who are employed in the health and social care sector in a supervisory role.	None
SVQ Social Services and Healthcare (SCQF level 9)	This course is mandatory for those employed in senior and/or management positions within the adult care sector. subjects include: CPD of self and others; develop/ maintain healthy and safe practices in the workplace; promote/ maintain effective systems for communication; promote the well-being and protection of all individuals.	None
SVQ Healthcare Support - Clinical (SCQF Level 7)	This award allows Healthcare Support workers to demonstrate competence and knowledge while gaining recognition for their level of work.	None
CPD Award: Responsible Leadership and Management for Contemporary Business	The course consists of three modules: Responsible leadership and management for organisational performance; Ethical solutions for global business; Sustainable project management.	None
CPD Award: Leading and Managing Care Services (SCQF level 9)	Three modules are: Leadership and management in a care context; Leading and managing effective communication systems; Managing protection, risk and promotion of care values.	None
CPD Award: Digital Futures in Health and Social Care (SCQF level 9)	This course is aimed at anyone who wants to learn about the changing nature of health alongside the use of digital technology.	• Topics covered include: • Barriers to digital integration • Big data • Drivers and enablers of digital technology in healthcare • Ethical issues surrounding digital health • Human centred design Partnerships in health and social care • Thinking about digital health - political economy approach Thinking about digital health - political: sociomateriality and the biopsychosocial model • Thinking about digital health - political: surveillance and privacy

CPD Award: Digital Health and Social Care (SCQF level 11)	This module will provide students with the opportunities to explore how digitisation is used to improve health and social care delivery systems. They learn about data security, legislation, patient confidentiality, and the impact of digital connectivity, especially in relation to improving access for those in remote and rural areas.	Topics covered include: • Development of health and social care in a digital environment • Emerging technologies • Health information systems • Social determinants • Drivers/barriers to health and social care in a digital environment
PDA Health and Social Care Supervision (level 7)	This qualification is designed for employees who are in their first-line-management role and who provide supervision, support and guidance to other staff.	None
PDA Technology Enabled Care (level 7)	This online course has been designed and developed to support Scotland's National Digital Health and Care Strategy and workforce education around technology enabled care. It would be of interest to those who are new to technology enabled care as well as those who have experience within the field. It is specifically designed to enable you to develop or advance your knowledge, skills and abilities in this ever-changing field of practice. .	Both units
PDA Health and Social Care: Administration of Medication	This online course is an essential part of training for all carers involved in the administration of medication in care homes, residential care or care at home services.	None

Table 6: Vocational courses relevant to digital health and care

5 - Other Providers

There are a few organisations in the Moray region that can support learners working in health and social care and signpost them to opportunities:
• Moray Training provide SVQ training delivery to staff working in the private sector, specifically Social Services & Health Care level 3 and 4, and Leadership & Management for Care.
• Whilst not specifically focussed on health and social care, Moray Pathways is an organisation that provides information on training opportunities across the Moray region, with a huge network of training providers that they work closely with to help learners find the right course.

There are also a multitude of different courses available online for broader data skills – such as those detailed in the Data Skills for Work (DSW) database[5] - and some organisations have created learning resources sepcifically aimed at upskilling frontline health and social care staff (for instance, Health and Social Care Alliance Scotland have two SSSC Open Badges covering the basic principles of digital health and care and digital human rights principles[6]).

The Scottish Government's Future Skills Action Plan[7] aims to improve access to work-based learning, and integrate foundation and graduate apprenticeships into the education and skills system. In line with recommendations drawn from previous research, the Plan expects future development to involve more engagement between higher education / apprenticeships and employers, with co-production of course content, while exploring new approaches to upskilling and lifelong learning. This will include, for example, more flexible and online delivery models, and developing 'micro-credentials' (such as Massive Open Online Courses - MOOCs), that are recognised by industry and professional bodies. One example of an industry-recognised accreditation is the British Computing Society's Professional Certificate in Data Analysis, a three-day course that can be undertaken in a classroom or remotely.

6 - Key findings

From this desk research it appears that there are several courses delivered in the Moray region that explicitly mention digital health in the title (or otherwise obviously belong to the field of digital health and care):

- MRes Digital Health and Care;
- Digital Health and Social Care - SCQF Level 11;
- PDA Technology Enabled Care; and
- CPD Award: Digital Futures in Health and Social Care (SCQF levels 9 and 11).

However, there are other courses that include modules relating to digital health, for instance, the BA (Hons) Health and Social Studies includes modules on 'Digital Futures in Health and Social Care' and 'Informatics in health and social care', and the MA in Health and Wellbeing offers the opportunity to study modules in digital health and social care, e-health, and digital health.

The GSA Innovation School offers MSc level qualifications in both Medical Visualisation and Human Anatomy and Serious Games and Virtual Reality. These deliver skills in 3D digital reconstruction, interaction, visualisation, medical illustration, and offer students the transferable skills to design, develop and analyse games and simulations for healthcare.

At SCQF level 7 meanwhile, the HNC in Social Services provides "Telehealth care response" as an optional unit.

Current Gaps

From our research and analysis it is clear that there are two key gaps in terms of education and training provision in relation to digital health and care:

1. There is a need to ensure that digital is embedded as a core part of all health and social care teaching at FE and HE levels. The digital transformation of health and care is already well underway, and the nature of work is changing most radically for frontline staff, who need to adopt new ways of working, and to learn entire new skill sets previously not required of them in care delivery. It is crucial then that digital skills are an integral part of education and training for the future health and care workforce, to prepare them to work in digitally enabled care settings. (Rimpiläinen, S., 2022) Staff teaching health and social care courses (such as the HNCs in Social Services and Healthcare Practice, and the BA (Hons) in Health and Social Studies) must ensure that students have the skills they need to work digitally, making their work more manageable, sustainable and flexible.

2. There are a number of courses being delivered in Moray which could benefit from – but do not currently include - digital health and care content. For instance, computing courses (such as the HNC/D in Computing and Computer Science, and the BSc (Hons) in both Applied Software Development and Computing) are crucial to the digital transformation of health and care services, as these subjects supply a vital pipeline of talent for the development and running of the digital infrastructure and devices supporting the delivery of health and care, as well as in developing future innovations.

7 - Next Steps

DHI supports the creation of more agile and responsive curriculum design processes and course provision in both Further and Higher Education for the purposes of digital health and care subjects - as well as those focussing on the digital transformation of the wider health and care sectors.

Specifically, the focus for future frontline health and social care staff is around ensuring that the curriculum is continually up to date, and able to respond to the changing working conditions in the sector that is going through a digital transformation. For those training to work in digital health and care roles, this means creating clearer, up-to-date, educational pathways and new educational opportunities in a more flexible manner.
Reflecting the broader Scottish education landscape, Moray has all the right ingredients in place to support a thriving, digitally-enabled health and care sector - as well as to respond to the growth-potential presented by the digital health and care industry.

There is also a need to create flexible upskilling and reskilling opportunities for existing staff to move into new roles. There is a need for innovative curricula solutions in the Moray region, and micro-credentials are widely recognised as instrumental in supporting upskilling and reskilling in a variety of labour markets - particularly where new technologies such as digital technology are changing skills demands. The RCE is funding the development of micro-credentials to support the frontline health and social care workforce in Moray and complement existing online courses.

The RCE supports the aspirations of UHI Moray and UHI in developing and delivering a full educational route for school leavers to prepare for careers in digital health and care up to postgraduate studies' level. Currently, this is a unique educational pathway, pending validation, with a potential to extend it into Masters and PhD level. This route will help increase local research capacity and attractiveness of the region for high calibre academic professionals and talent.   DHI research has highlighted that one way to promote the health and care sector and raise awareness of digital career opportunities to graduates is to make interesting final year project topics available to students. These could be tailored to meet the needs of both the student cohort and the sector, requiring students to engage with the sector in detail in order for them to gain a better understand of the domain (Rimpiläinen, S., Morrison, C., Nielsen, S. L., & Rooney, L., 2019).

In addition, the RCE will support UHI Moray teaching staff to help them embed digital health and care content into their respective curricula, both to support future staff entering the digitalising health and care sectors, and ICT/computing students considering careers or future studies in health and care or in digital health and care.

Sources

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Appendix A: Scottish Credit and Qualifications Framework (SCQF)

The SCQF is the national qualifications framework for Scotland.

By using two measures (the level of a qualification or learning programme and the number of credit points awarded), the Framework helps you understand and compare various Scottish qualifications.

The level of qualification indicates the level of difficulty and the number of credit points indicates the length of time it takes to complete.

One SCQF credit point represents an average of 10 hours of learning time.

SCQF Levels	SQA Qualifications			Qualifications of Higher Education Institutions	Apprenticeships & SVQs
12			Professional Development Award	Doctoral Degree	Professional Apprenticeship
11			Professional Development Award	Masters Degree, Integrated Masters Degree, Post Graduate Diploma, Post Graduate Certificate	Graduate Apprenticeship, Professional Apprenticeship, SVQ
10			Professional Development Award	Honours Degree, Graduate Diploma, Graduate Certificate	Graduate Apprenticeship, Professional Apprenticeship, SVQ
9			Professional Development Awards	Bachelors / Ordinary Degree, Graduate Diploma, Graduate Certificate	Graduate Apprenticeship, Technical Apprenticeship, SVQ
8		Higher National Diploma, Advanced Diploma	Professional Development Award	Diploma of Higher Education	Higher Apprenticeship, Technical Apprenticeship, SVQ
7	Advanced Higher, Awards, Scottish Baccalaureate	Higher National Certificate, Advanced Certificate	Professional Development Award	Certificate of Higher Education	Modern Apprenticeship, SVQ
6	Higher, Awards, Skills for Work Higher	National Certificate	Professional Development Award / National Progression Award		Modern Apprenticeship, Foundation Apprenticeship, SVQ
5	National 5, Awards, Skills for Work National 5	National Certificate	National Progression Award		Modern Apprenticeship, SVQ
4	National 4, Awards, Skills for Work National 4	National Certificate	National Progression Award		SVQ
3	National 3, Awards, Skills for Work National 3	National Certificate	National Progression Award		
2	National 2, Awards	National Certificate	National Progression Award		
1	National 1, Awards				

Appendix B: Apprenticeship Provision in Scotland

Foundation Apprenticeships are designed for school students (usually starting in fifth year and studying for Highers and Nationals) and are an ideal way for young people to gain experience and an industry recognised qualification in areas of key growth sectors.
Apprentices spend part of the school week at college (or a learning provider) and with an employer, to gain practical work experience as well as an industry-recognised qualification at SCQF Level 6 - the same level of learning as a Higher. They normally take up to two years to complete.

The **Modern Apprenticeship** in Social Services and Healthcare is available at the following levels:
- SCQF Level 6
- SCQF Level 7
- SCQF Level 9 (this is a technical level apprenticeship).

Graduate Level Apprentices (GLAs) are in paid jobs and spend most of their time learning at work, but they are also students at university or college. They are designed by industry and for industry, so apprentices can be confident that what they are learning is relevant and right for the job. They are currently available from SCQF level 8 (DipHE) through to SCQF level 11 (Master's degree level).

At present, there are 11 GLA courses:
- IT:
    - Software Development at SCQF level 10
    - Management for Business at SCQF level 10
    - Cyber Security at SCQF level 10
    - Cyber Security at SCQF level 11
- Engineering:
    - Design and Manufacture at SCQF level 10
    - Instrumentation, Measurement and Control at SCQF level 10
- Civil Engineering at SCQF level 8
- Civil Engineering at SCQF level 10
- Construction and the Built Environment at SCQF level 10
- Business Management at SCQF level 10
- Business Management; Financial Services at SCQF level 10

Appendix C: GSA Wider Digital Health and Care Related Provision in Scotland

Course Title	Further Information	Digital Health/ Care Content
BDes/MDes Design for Health and Wellbeing	This programme covers a broad spectrum of design-led innovation practices associated with organisational, systemic and social change as they relate to the domain of Health and Wellbeing	
MRes Digital Health and Care	Students undertake research projects (either full-time or part-time) which are focused on digital health and care.	Focussed entirely on digital health and care.
MSc Medical Visualisation and Human Anatomy	This programme is taught by the School of Simulation and Visualisation (SimVis) at GSA in collaboration with the Anatomy department in the School of Life Sciences, University of Glasgow.	This programme offers cadaveric dissection with 3D digital reconstruction, interaction, visualisation and medical illustration using state of the art VR facilities.
MSc Serious Games and Virtual Reality	This course offers students the transferable skills to design, develop and analyse games and simulations for a range of application areas.	Students conduct interdisciplinary research in the serious applications of games technology including healthcare.
MSc International Management and Design Innovation	The programme provides students with a skillset in design process and critical thinking and prepares them for several potential pathways in a future career, such as entry into a professional design/management consultancy environment, working as an independent consultant, pursuing further academic study by research, or taking on a management or strategic role within a company or public sector organisation.	Projects developed frequently include digital and health related areas.
MDes Design Innovation & Service Design	The programme equips students with the thinking, tools and processes required to practice Service Design, so they can drive innovation in the conception, design and delivery of services and experiences. Live projects provide a rich experience of design innovation through collaborations with private and public sector organisations.	Services developed frequently include digital and health related areas.
Design Innovation & Collaborative Creativity	The programme equips students with the thinking, tools and processes required to practice Service Design, so they can drive innovation in the conception, design and delivery of services and experiences. Live projects provide a rich experience of design innovation through collaborations with private and public sector organisations.	Projects developed frequently include health and wellbeing related areas.
MDes Design Innovation and Citizenship	Citizenship means being part of a community that has the power and capabilities to enact change when it is needed. This programme looks at ways of helping people to take control of circumstances and processes that directly affect their everyday lives through the intelligent application of design thinking	Projects developed frequently include health and wellbeing related areas.