Skills Development **Scotland** 

# Graduate Apprenticeships

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At SCQF Levels 8-11

Progress report June 2021 Incorporating programme activity from 2017 to 2020

## Foreword

As Chair of Skills Development Scotland and a Scottish employer, I am very pleased to introduce the third annual progress report for Graduate Apprenticeships.

Graduate Apprenticeships are now in their fourth year of delivery providing more than 3,500 people access to industry relevant degree courses.

The continued increase in uptake since their launch in 2017, with 1,158 individuals starting a Graduate Apprenticeship this year, is due to the continuing and expanding demand from employers for the benefits and added value that Graduate Apprenticeships provide to their business. Thirteen Higher Education Institutions now offer Graduate Apprenticeships as part of their curriculum.

Graduate Apprenticeships offer a unique opportunity for employers, enabling them to recruit from a fresh pipeline of young talent. GAs provide a new route for people to gain degree level, industry recognised qualifications where their academic learning is contextualised in their workplace. Providing a blend of academic and work-based learning, Graduate Apprenticeships enable new and existing employees to up-skill or re-skill while in paid employment. This extends the reach of advanced level qualifications to a wider group of learners.

The qualification is flexible and recognises prior learning and experience, enabling learners to begin their study at the right point and complete the course in less time. Co-designed with employers to support critical occupations and growth areas of the Scottish economy, the aim of Graduate Apprenticeships is to ensure that industry has a supply of highly skilled and qualified individuals and aligns talent provision with current and emerging skills shortages.

Graduate Apprenticeships are proven to deliver tangible business benefits, including increased productivity and innovation, talent development and retention and improved service delivery. They also can have an immediate impact on day-to-day operations as the apprentice is able to put their learning into practice straight away.

Despite the pandemic, Graduate Apprentices continued to progress with their learning last year and more opportunities than before were available for a new cohort of undergraduates starting their qualification in academic year 2020/21. This is testament to the strength of employers in these occupational areas and to the innovation and flexibility of Higher Education Institutions who exploited digital platforms and moved learning online.

Only a very small number of Graduate Apprentices were made redundant, with the majority securing an alternative GA employer, many of whom were supported through the extended Adopt an Apprentice scheme.

Ongoing engagement with Scottish employers confirms the value they place on these qualifications, with Graduate Apprenticeships featuring as an integral component in their skills development plans in a post-furlough labour market. Graduate Apprenticeships are co-designed with employers to offer bespoke learning and fresh thinking. They are designed to develop the meta-skills in individuals, including resilience and adaptability, that provide the building blocks for lifelong great learners to better cope in a fast-changing world of work.

In partnership with the Scottish Apprenticeship Advisory Board (SAAB), we will continue to drive the development of Graduate Apprenticeships so that they remain relevant to the critical occupational growth areas of the Scottish economy.

Graduate Apprenticeships are future-focused and are available across a spectrum of growth industries that offer strong career prospects for the future. They respond to skills shortages and labour market challenges by providing individuals with qualifications that feed into priority growth areas, including green jobs and digital. They also play a key role in supporting the Scottish Government's Young Person's Guarantee. The Scottish Government has acknowledged that Scotland's economic recovery will be education-led and has reaffirmed its longstanding commitment to work-based learning, highlighting the importance of prioritising, safeguarding and embedding Graduate Apprenticeships within the learning system. Graduate Apprenticeships are up-skilling workers in key occupational areas and providing a pipeline of new talent that will support the recovery and growth of Scotland's economy.



**Frank Mitchell** Chair of Skills Development Scotland

# **Ministerial Statement**

The pandemic has affected every part of society – from the restrictions impacting the economy and the way we work, to education and the skills system.

Supporting Scotland's apprentices, and our apprenticeship system, through the pandemic has been a key priority for the Scottish Government. We know that a successful recovery must be led by education and skills.

Moving towards recovery, it's more important than ever to equip businesses and individuals with the right skills and capabilities, through apprenticeships, to fuel the economy, create jobs and support fair work ambitions. This is key to our commitment to support those furthest from the labour market into employment and apprenticeships.

Apprenticeships are a vital way for all employers to continue to invest in their workforce, providing the skills the economy needs both now and in the future. This is central to the Scottish Government's immediate priority to lead the country through the pandemic into a recovery that protects and creates jobs and backs our young people.

Graduate Apprenticeships – providing critical skills that employers need – have a key role to play as part of the national endeavour to drive recovery and transform the economy.

We know that many of the factors shaping the future of work, like rapid advances in technology, changes in the workplace and the skills needed to thrive, have been accelerated by the pandemic. We also know that Graduate Apprenticeships – led by employer demand aligned to industry need – are designed to meet the requirements of the future now.

Providing a pipeline of skills in growth sectors of the economy, while creating opportunities for young people and for the existing workforce, is crucial to meeting Scottish Government aims for a sustainable economic renewal.

A skilled workforce for employers is crucial to meet our economic ambitions – while the Young Person's Guarantee ensures education, training, a job or apprenticeship for every 16 to 24-year-old.

To meet these shared goals, we need to continue to work together on the national economic mission and a sustainable recovery based on skills.

The collaboration between employers, universities, Skills Development Scotland, and the Scottish Funding Council, that forms the basis of Graduate Apprenticeships, exemplifies the partnership approach that we must harness in the months and years ahead.

The flexibility in delivery, the innovation shown by learning providers and the demand from employers ensured Graduate Apprenticeships continued to contribute critical skills during the challenges of the past year.

For employers, Graduate Apprenticeships offer the skills they need to meet both business and economic demands, whether this be addressing an ageing workforce or finding the skills that will help them meet Net Zero targets. As the Scottish Government drives the need for fair work, Graduate Apprenticeships can also contribute to improving equality and diversity in the workplace, widening access to work-based learning.

Ensuring we maintain, sustain, and grow a world-class work-based learning system that provides pathways for young people from senior phase at school to master's degree level is critical to the future success of Scotland.

Graduate Apprenticeships will play a pivotal role in our shared mission to renew the economy, provide good jobs and support fair work.



Jamie Hepburn Minister for Higher Education and Further Education, Youth Employment and Training

Graduate Apprenticeships were developed in response to critical skills shortages, as highlighted by industry and by labour market insights. They are demand-led and the growth in uptake of GAs over the last 4 years demonstrates the appetite that employers have for them.

GAs offer a great opportunity for individuals to complete a university degree, while in paid employment. They offer employers the opportunity to tailor the work-based element of the degree programme to suit their specific business needs, making apprentices quickly productive and providing immediate tangible business benefits. This report offers some excellent examples of the value that GAs bring to both individuals and employers.

On behalf of SAAB, I fully endorse Graduate Apprenticeships as a fantastic way for industry to build the skills capacity of the workforce. For individuals, either leaving school or already in the labour market, they offer the chance to gain a university degree designed to meet the specific skills needs of Scotland's employers. The GA is an exceptional pathway through education while in employment.

Alison McGregor Co-Chair, Scottish Apprenticeship Advisory Board



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# Introduction

### Background

As Scotland's national skills agency, the purpose of SDS is to drive productivity and inclusive growth through investment in skills, enabling businesses and people to achieve their full potential.

International research evidence tells us that advanced economies, with a better balance of academic and work-based approaches to skills development, have higher levels of productivity and lower levels of youth unemployment.

The skills of Scotland's people can be under-utilised and the qualifications that people gain are not always put to full use within businesses.

Our ambition is to support Scotland to take its place amongst the topranking Organisation for Economic Co-operation and Development (OECD) countries for productivity.

The Scottish economy is forecast to grow by 1.8% in 2021, then 7.5% in 2022,<sup>1</sup> evidencing a continued demand from employers and the importance of Graduate Apprenticeships in supporting Scotland's economic recovery from COVID-19.

Graduate Apprenticeships help to ensure that the demand for skills from business and wider industry are met. They do this by providing qualifications that support up-skilling of new and existing employees in critical occupations and growth areas of the economy.

### **Graduate Apprenticeships**

Graduate Apprenticeships (GA) are industry recognised and accredited. They are available from Diploma up to Master's level qualification and are mapped to the Scottish Credit and Qualifications Framework (SCQF) at levels 9, 10 and 11.

Graduate Apprenticeships are offered in key occupational growth areas of the economy where there is a real need for skilled employees.

The qualification is delivered through partnerships between employers and universities. The demand for GAs is employer-led and employers either recruit new staff into a GA position or offer a GA position to an existing member of their workforce. Individuals acquire the knowledge and application within the workplace, as learning is contextualised and can be put into practice straight away.

Graduate Apprenticeships enable apprentices to begin and end their study at the right point and are an attractive proposition for new and existing employees looking to up-skill or retrain. For example, an apprentice who has already attained a relevant qualification at SCQF level 8, prior to enrolling on a GA at SCQF level 10, may be eligible to have a percentage of their GA qualification recognised as being achieved already.

This accelerated entry may shorten the amount of time they require to complete the course. Recognised exit points ensure that an apprentice leaving the programme early can be certificated for the work completed.

<sup>1</sup> https://www.gov.scot/publications/monthly-economic-brief-february-2021/pages/7/

Higher Apprenticeships are similar to a Graduate Apprenticeship but are an SCQF Level 8 award.

Higher Apprenticeships have the same principles as Graduate Apprenticeship at the more advanced SCQF levels.

Creating new pathways in key occupational growth areas not only provides access to potential job opportunities that require degree-level qualifications, but also addresses current and emerging skills shortages.

### **Delivery of Graduate Apprenticeships**

Graduate Apprenticeships are helping to transform the skills and learning landscape and the flexibility and relevance of learning at degree level.

They offer an innovative approach for employers and universities / Higher Education Institutions (HEIs) to collaborate in providing workbased learning pathways.

The context for learning differs from traditional degree programmes and the mode of delivery is significantly weighted to the workplace and not the campus.

## No. of learning providers actively engaged in delivering Graduate and Higher Apprenticeships



HEIs and employers are evolving current degree programmes; including re-orienting the design of curriculum, the learning experience and new approaches in delivery and assessment to include applying theory to workplace delivery. In doing so, they are opening new opportunities for up-skilling and re-skilling for individuals who might otherwise not have considered Higher Education.

They are also giving employers, who prior to GA did not have HE as an option for the delivery of work-based learning pathways, access to high quality, advanced levels of learning.

There are now 13 learning providers (see Figure 1, following page) that deliver Graduate and Higher Apprenticeships – relative to 9 in 2017/18. GA uptake for each learning provider is dependent on the number of places and type of frameworks available. A full list of the frameworks delivered by each learning provider is provided in **Annex 3**.

Whilst most learning providers are based in the central belt of Scotland, the tables in **Annex 2**, show that these positions are delivered by employers across all Scottish local authorities.

To facilitate the reach of Graduate Apprenticeships across Scotland, learning providers offer a variety of delivery models, increasing the accessibility and flexibility of GAs as a learning pathway.

Before the pandemic, most learning providers offered blended learning with a mix of online and offline (campus attendance) delivery as well as work-based assessments. Campus attendance varied from one day a week (or month) to block release, with apprentices usually attending their university campus for several weeks every term.

The amount of time that an apprentice spent on campus differed by university (and sometimes by framework) and was tailored, where possible, to meet specific employer needs.

### Delivering Graduate Apprenticeships in a Global Pandemic

The disruption to the labour market and Scottish Apprenticeships, through successive lockdowns and changing restrictions, had the potential to dramatically impact youth employment, with future implications for the skills needs of industry and the economy.

Our first priority was to protect those apprentices already in work.

Enhanced support was made available to employers and learning providers to ensure existing apprentices were retained and new opportunities continued to be made available.

SDS delivered a series of online National Communities of Practice and other webinars, with learning providers and employers, which focused on solutions to enable continued engagement of learners.

We worked with learning providers to build increased flexibility into the recruitment timelines to support the needs of employers and Graduate Apprentices starting in academic year (AY) 2020/21.

Our targeted offer to apprentices facing redundancy was also enhanced, with Adopt an Apprentice funding and eligibility extended to Graduate Apprentices.

More employers were encouraged to take on a Graduate Apprentice or up-skill existing staff through the Scottish Apprenticeship Employer Grant (AEG).

Twelve Graduate Apprentices have been made redundant throughout the pandemic. Of those, 8 were supported into another Graduate Apprenticeship opportunity with a new employer with 6 benefiting from Adopt an Apprentice support.

#### Figure 1: GA Learning Providers

	2017-18	2018-19	2019-20	2020-21
Edinburgh Napier University	$\checkmark$	$\checkmark$	$\checkmark$	~
Glasgow Caledonian University	$\checkmark$	$\checkmark$	$\checkmark$	~
Glasgow Kelvin College	$\checkmark$	$\checkmark$	$\checkmark$	
Heriot-Watt University	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Queen Margaret University		$\checkmark$	$\checkmark$	$\checkmark$
Robert Gordon University	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
The Open University		$\checkmark$	$\checkmark$	$\checkmark$
University of Aberdeen			$\checkmark$	
University of Dundee	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
University of Edinburgh		$\checkmark$	$\checkmark$	$\checkmark$
University of Glasgow			$\checkmark$	$\checkmark$
University of St. Andrews		$\checkmark$	$\checkmark$	
University of Stirling				$\checkmark$
University of Strathclyde	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
University of the Highlands and Islands	$\checkmark$	$\checkmark$	$\checkmark$	~
University of the West of Scotland	$\checkmark$	$\checkmark$	$\checkmark$	~

Graduate Apprenticeships were largely uninterrupted by the pandemic. Higher Education Institutions quickly extended and mobilised digital platforms, to offer new approaches to online learning, while the apprentices continued their qualification by working and learning from home. This innovation has widened access for learners and ensured continuity of learning throughout the pandemic.

Graduate Apprenticeships demonstrated resilience to the challenges faced, by continuing to meet a demand-led approach, building on the strong collaboration between industry and learning providers to shape delivery through partnership working.

### **Evolution of Graduate Apprenticeships**

Early development work began in 2015, in partnership with industry, universities and colleges across Scotland, to create a pilot apprenticeship in Civil Engineering at SCQF level 8.

In January 2016, 7 apprentices started on the first GA pilot with the University of the Highlands and Islands. Now referred to as a Higher Apprenticeship, the Civil Engineering at SCQF level 8 was the first work-based learning apprenticeship under the GA umbrella.

This award is still being offered and now provides individuals with a progression option onto the Graduate Apprenticeship in Civil Engineering at SCQF level 10.

In 2017, the Graduate Apprenticeship was officially launched, providing a new route into degree-level study for individuals currently in employment, or for individuals wanting to go straight into work from education.

#### Figure 2: Key features of a Graduate Apprenticeship



Flexible entry and exit points



Available to individuals who **live and work in Scotland** 



Designed by industry for industry



Open to **all employers** and their full-time **employees** 

Apprentice is **employed** for the duration of the apprenticeship

The programme has expanded to include key sectoral areas, as evidenced by occupational demand, and emergent new hybrid roles such as data science.

The full list of GA frameworks is shown in Figure 3. Accounting and Early Learning and Childcare were new frameworks introduced for AY 2019/20, broadening the range of frameworks available.

Further developments in Graduate Apprenticeships will be led by the Scottish Apprenticeship Advisory Board in response to demand from industry in critical occupation areas.

### **Progress to date**

GAs deliver unique, high quality workplace learning experiences that are attractive to both individuals and employers.

For this reason, the level of uptake has grown rapidly in a short period of time. In the first year of delivery, there were 278 registered apprentices working for 141 businesses, with 9 institutions offering up to 6 different GA frameworks.

In AY 2020/21 there were 1,158 registered apprentices working for 500 employers with 13 institutions offering up to 13 different GA frameworks. Note that the Business Management: Financial Services framework was amalgamated with Business Management last year as they are very closely aligned.

Figure 3: Frameworks Available by Year of Launch

	Framework	SCQF Level	Year Launched
6	Accounting	SCQF Level 11	2019/20
ÎÏÎ	Business Management	SCQF Level 10	2018/19
ΟÎ	Business Management: Financial Services	SCQF Level 10	2018/19
<b>\$</b> .	Civil Engineering	SCQF Level 8	2017/18
<b>\$</b> .	Civil Engineering	SCQF Level 10	2017/18
<b>\$</b> .	Construction and the Built Environment	SCQF Level 10	2018/19
	Cyber Security	SCQF Level 10	2017/18
	Cyber Security	SCQF Level 11	2018/19
	Data Science	SCQF Level 10	2018/19
	Early Learning and Childcare	SCQF Level 9	2019/20
<b>\$</b> .	Engineering: Design and Manufacture	SCQF Level 10	2017/18
<b>\$</b> .	Engineering: Instrumentation, Measurement and Control	SCQF Level 10	2018/19
	IT: Management for Business	SCQF Level 10	2017/18
	IT: Software Development	SCQF Level 10	2017/18

The fourth industrial revolution or 'Industry 4.0' has highlighted a future that is increasingly unpredictable. This uncertainty, along with the impact of the global pandemic, further highlights the necessity for Scotland's young people to acquire the skills not only to cope with change but to thrive in it. SDS is leading a programme of work to understand what these changes mean for the workplace, and the skills that will be required for this.

This future-focused work is driving innovation in Graduate Apprenticeships to ensure that Scotland's young people and employers are prepared for this complex future. The introduction of meta-skills as an integral part of apprenticeship design, for example, puts a new emphasis on the identification, application, and reflection of key skills, such as self-management, social intelligence, and innovation. These meta-skills act as the building blocks to support a future of versatile and adaptive workers. These key attributes were also highlighted in the recent OECD Independent Review of Curriculum for Excellence report which correlates with the ambition of the GA programme.

The Scottish Apprenticeship Advisory Board (SAAB) plays a vital role in the development of apprenticeships in Scotland through facilitating feedback from employers and learners. Moreover, SAAB ensures that GAs accurately reflect and respond to the needs of industry, and are clearly aligned to economic growth and job opportunities.

We will continue to engage with employers and learners to ensure that their opinions are heard, and that their voices contribute to the continuous improvement of Graduate Apprenticeships. By conducting formative evaluations with employers and learners we gather insight to ensure that GAs continue to evolve and grow, making work-based learning accessible, valued, and recognised. "Within the technology sector, there's often a bit of a skills gap, so Graduate Apprenticeships enable us to develop that talent ourselves. We can take people on before university and get them to do all the industry-accredited qualifications alongside their degree. It means we've got some homegrown talent coming out the other end, which is fantastic."

**Alexandra Walker** Business Operations Director, Forrit

"As a business, Graduate Apprentices bring a huge array of benefits. It's fantastic for us to witness, and play a part in, the development of some of the most up and coming talent in the IT Sector."

**Steven Reilly** Delivery Lead, Aviva

### **Context for Readers**

This is the third Graduate Apprenticeship progress report. In this report we provide detail for four groups of Graduate Apprentices. Each group of apprentices is categorised according to the academic year in which they started their GA: 2017/18, 2018/19, 2019/20 or 2020/21.

Graduate Apprenticeship data was sourced from our Financial and Information Processing System (FIPS), in line with our other apprenticeship programmes. This system provides assurance of rigour and robustness in our reporting.

Data in this report is from a FIPS extract taken on the 26th May 2021.

### Structure of this report

GAs are targeted to influence three distinct audiences:

- **People** (learners)
- Businesses (employers)
- The skills system (skills policy and provision)

This report is structured to describe GA delivery and progress, to align with these audiences, with a section on each.

Percentages in this report may not sum to 100% due to rounding. Throughout the report, disclosure control is applied to figures less than 5 or where such figures can be identified through differencing. Where disclosure control has been applied, an asterisk (\*) will be used in place of the actual figure.

#### Definitions for terminology used in this report

- Opportunities realised: The number of new apprentices registered on a GA framework at the beginning of each academic year, regardless of entry point.
- In training: The number of apprentices continuing in their GA studies including those in suspended study (which individuals can do for a period of up to 12 months, before being automatically withdrawn) and those re-sitting exams.
- Early leavers: All apprentices who leave their apprenticeship before achieving the full qualification they were registered for, including those who exit at a recognised exit point (e.g. achieve a qualification at SCQF level 9 rather than 10).
- Partial achievers: Any apprentice who does not achieve the full qualification they were registered for, but is recognised for achieving quantifiable component parts of their qualification.
- Achievers: Those who exit the GA with the full SCQF level Graduate or Higher Apprenticeship they registered for.
- New employee/existing employee classification: Apprentices are defined as an existing employee if they started work with their employer up to 6 months before beginning their GA.

Any comments or suggestions regarding the content of this report are welcome and can be emailed to: **user\_feedback@sds.co.uk**.

# **Key results**

# 3,512 individuals taking up a graduate apprenticeship in the first 4 years of delivery. Sustained uptake during a year of pandemic.

#### Number of individuals taking up a Graduate Apprenticeship

	2017-18	277	
<b>AAA</b>	2018-19	920	
	2019-20	1,157	
	2020-21	<b>1,158</b> <sup>2</sup>	



**Increasing levels** of GAs starting their course in year 2, having received recognition of prior learning.

In 2020, 21.2% of GAs studying a STEM related framework were **female** (+3.1pp since 2017).

#### Number of individual learning providers delivering Graduate Apprenticeships





#### Number of GA Employers

	2017-18	140	
里田	2018-19	357	
	2019-20	486	
	2020-21	500	

#### Number of GA Frameworks



2 In our Q4 2020/21 MA Official Statistics publication, we reported a figure of 1,150 – which was correct, as at 31st March 2021. Due to the pandemic, the period for GA recruitment was extended to support employers, resulting in later registration of 8 additional learners. This report is based on a data extract from 26th May 2021 and therefore includes these additional learners.

### **Employer Survey (2021)**

A survey was carried out this year with employers engaged in Graduate Apprenticeships.<sup>3</sup> The key findings showed:



**100%** confirmed GAs included in longer-term recruitment strategy



77% planning to employ more GAs in 2021

Planned GA recruitment set to grow by 12% in 2021

Top 3 drivers for recruitment:



- Attracting young talent and enhancing diversity (77%)
- Developing skills to support succession planning (70%)



Addressing skills shortage vacancies – particularly in key areas such as IT/ Digital skills (42%).



Employers, on average, rate the value of GAs as **8** on a scale of one to ten.

Many employers view GAs as a way of attracting recruits from a wider range of backgrounds; including young people who may not have had the resources or motivation to go to university.

### Learner survey (2019)<sup>4</sup>



- 83% of learners said they were satisfied with the GA
- 89% of learners said they would recommend the GA
- 86% of learners said what they were studying was relevant to their job

When asked about their experience on the Graduate Apprenticeship, out of a score of 10 (1 = strongly disagree to 10 = strongly agree)



- I am able to apply my learning in the workplace scored 7.2
- I get the opportunity to develop a portfolio that supports professional accreditation scored 6.9

3 In early May 2021, SDS carried out a series of structured consultations with employers who engage with the Graduate Apprenticeship programme.

4 The last GA learner survey was carried out in 2019, these results were reported in the previous GA annual report.

# Learner experience: Engineering: Design and Manufacture

Graduate Apprentice Samir Khan-Young has been working round the clock to support the NHS in its COVID-19 response. The former Bannerman High School pupil started his Engineering: Design and Manufacture Graduate Apprenticeship at Thales in 2017 and has established himself as a key member of the team.

Samir's greatest achievement to date has been working nightshifts for Thales' Manufacturing Team as they produced PPE for NHS frontline workers.

Samir said: "I was delighted to put my skills to good use during lockdown as part of the nightshift team who were making PPE for NHS staff. It was a rewarding experience as we were delivering a vital service as efficiently as possible.

"My Graduate Apprenticeship has allowed me to develop both professionally and academically. It has opened doors for me to explore other avenues of engineering, such as management and design."

Samir's commitment and dedication led to him winning Graduate Apprentice of the Year and Scotland's Apprentice of the Year at the Scottish Apprenticeship Awards in March 2021. Having previously completed a Modern Apprenticeship at Govanbased Thales, he was aware that a Graduate Apprenticeship was the natural progression.

Samir explained: "I knew that a Graduate Apprenticeship was the perfect next step for me to progress after my Modern Apprenticeship. Thales has supported me by giving me plenty of study time. The awards are a direct reflection on the support and encouragement my Thales colleagues have given me, which has allowed me to grow professionally."



Samir Khan-Young , Graduate Apprentice

### THALES

# **High Performing People**

Please note that as our annual Graduate Apprenticeship publication is based on a snapshot of data at a particular point in time, data is subject to minor change. This is stated in our previous publications. This year, increased levels of delivery flexibility, due to the pandemic, mean that there may be additional Graduate Apprentices who have not been registered through SDS systems, at the point of reporting.

### **Uptake of GA opportunities**

This section of the report provides details about the individuals that have registered to undertake a Graduate Apprenticeship, for each year, to date. Graduate Apprenticeships continue to be in demand by employers, employees, and by industry.

Despite the disruption caused by the COVID-19 pandemic, there has been a continued increase in the number of individuals registered for a Graduate Apprenticeship this year. Universities and colleges were very quick in implementing digital learning solutions for students and adopting remote learning options. They have also supported the recruitment of GAs by offering flexibility in start dates for participants.

#### Alterations since last report

Routinely, data validation exercises are carried out to ensure our data is accurate and robust. As such, uptake of GA opportunities differs slightly to previously published figures.

#### **Entry Point**

A Graduate Apprenticeship at SCQF level 10 (Honours degree level) can take up to four years to complete, while a Higher Apprenticeship at SCQF level 8 (Diploma of Higher Education) can take up to 2 years to complete.

It is possible for individuals to complete a GA in less time. Individuals with existing qualifications and experience in a relevant subject area can be offered 'recognition of prior learning' (RPL), which ensures that they do not have to duplicate previous studies.

Although most GAs tend to start their studies in Year 1, Table 1 provides a summary of the number and proportion of individuals accessing the GA at each entry point, over the last 4 years.

	201	7-18	2018-19		2019-20		2020-21	
Degree course year of entry	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Year 1	230	83.0%	821	89.2%	977	84.4%	938	81.0%
Year 2	24	8.7%	51	5.5%	144	12.5%	157	13.6%
Year 3	*	*	48	5.2%	*	*	*	*
Year 4	*	*	-	-	*	*	*	*
Total	277	100.0%	920	100.0%	1,157	100.0%	<b>1,158</b> 7	100.0%

Table 1: GA uptake by degree course year of entry<sup>6</sup>

The number of individuals who have benefitted from RPL, by beginning their degree at an advanced stage, has varied across each cohort. This year, the proportion of Graduate Apprentices starting in year 2 of their degree has increased to 13.6%, the highest it has been since GAs were introduced.

Figure 4 shows the proportion of GAs who have been able to bypass at least the first year of their degree through RPL. This has increased by 3.4 percentage points (pp) since 2019/20 and is the highest recorded use of RPL to date. We continue to track this and note the correlation between this and other relevant variables, particularly the age profile of apprentices.

Figure 4: RPL 4-year trend



6 As described in the context for Readers section (p13), disclosure control is applied to figures less than 5 or where such figures can be identified through differencing. Where disclosure control has been applied, an asterisk (\*) will be used in place of the actual figure.

7 In our Q4 2020/21 MA Official Statistics publication, we reported a figure of 1,150 – which was correct, as at 31st March 2021. Due to the pandemic, the period for GA recruitment was extended to support employers, resulting in later registration of 8 additional learners. This report is based on a data extract from 26th May 2021 and therefore includes these additional learners.

#### **GA Frameworks**

Each Graduate Apprenticeship is classified under a separate framework (or subject area of study). These frameworks have been developed in consultation with industry and in response to the current and future skills needs within Scotland's economy.

Since 2017/18, the number of available frameworks has increased from 6 to 13. Table 2 details the number of individuals registered under each

framework across each academic year. Business Management has continued to be the most popular framework, with 33.8% of GA uptake in 2020/21 (+7.0pp since 2019/20). Other frameworks experiencing a growth in uptake were Data Science (+1.7pp), Early Learning and Childcare (+0.8pp), and Engineering: Design and Manufacture (+2.8pp)

Table 2: GA uptake by framework

	201	2017-18		2018-19		2019-20		2020-21	
Framework	No.	% total	No.	% total	No.	% total	No.	% total	
Accounting	-	-	-	-	38	3.3%	43	3.7%	
Business Management	-	-	293	31.8%	310	26.8%	391	33.8%	
Business Management: Financial Services <sup>8</sup>	-	-	20	2.2%	-	-	-	-	
Civil Engineering L10	12	4.3%	101	11.0%	124	10.7%	95	8.2%	
Civil Engineering L89	35	12.6%	24	2.6%	12	1.0%	*	*	
Construction and the Built Environment	-	-	64	7.0%	121	10.5%	96	8.3%	
Cyber Security L10		2.2%	54	5.9%	50	4.3%	41	3.5%	
Cyber Security L11	-	-	25	2.7%	53	4.6%	42	3.7%	
Data Science	-	-	17	1.8%	45	3.9%	67	5.6%	
Early Learning and Childcare	-	-	-	-	30	2.6%	39	3.4%	
Engineering: Design and Manufacture	64	23.1%	123	13.4%	129	11.2%	162	14.0%	
Engineering: Instrumentation, Measurement and Control		-	24	2.6%	36	3.1%	*	*	
IT: Management for Business		23.5%	46	5.0%	53	4.6%	37	3.2%	
IT: Software Development		34.3%	129	14.0%	156	13.5%	125	10.8%	
Total	277	100.0%%	920	100.0%	1,157	100.0%	1,158	100.0%	

8 Note that Business Management: Financial Services was amalgamated with Business Management and was only offered as a separate framework in 2018/19.

9 Civil Engineering at SCQF Level 8 is a two-year Higher Apprenticeship, rather than a four-year Graduate Apprenticeship.

#### GA uptake by Age

Table 3: GA uptake by age band

In 2020/21, the dominant age group was 25-34, as it was in the previous year, with 403 individuals (34.8% of all registered) in this group taking up a Graduate Apprenticeship. This differs from the national profile of undergraduate students across other types of degree programmes, highlighting the appeal of Graduate Apprenticeships to those who, perhaps, did not have the opportunity to study at degree level when they were younger. Table 3 shows the split by age band across each GA cohort to date.

	2017-18	2018-19	2019-20	2020-21
Age band	No. registered	No. registered	No. registered	No. registered
16-19	55	171	216	179
20-24	107	268	287	281
25-34	66	226	362	403
35-49	*	230	266	262
50+	*	25	26	33
Total	277	920	1,157	1,158

In 2020/21, the proportion of individuals starting a Graduate Apprenticeship, in each age band, remained relatively unchanged. Most significant changes were the decrease in uptake for 16-19year olds (-3.2pp) and increase in uptake for those in the 25-34 (+3.5pp). This suggests that work-based learning is continuing to attract older, more experienced employees as a means of up-skilling, where younger age groups may be more attracted to the freedom and lifestyle that full-time study provides. Much of this is cultural and SDS will continue to work with partners to ensure that younger age groups better understand the benefits of combining work with degree-level study. We will also continue to engage with employers to raise awareness of the potential for recruiting more school leavers into Graduate Apprenticeships.

Figure 5 shows each GA cohort as a proportion of total registrations each year. The graph shows that the 25-34 age band was the only age band to experience an increase in uptake, year on year.

Figure 5: GA uptake – % age band 4-year trend



**Annex 1** provides detailed uptake information, split by framework and age band, across each cohort. As with previous years, Business Management proved the most popular framework with individuals aged 25 and over. The uptake for this framework was also high among those under 25 (22%). Around a third of GAs under 25 were registered for the Engineering: Design and Manufacture framework with the IT: Software Development framework also proving popular (23%).

The top 5 frameworks within the 16-24 age band remain consistent across the last four years.



#### GA uptake by Gender

Since 2017/18, the proportion of females registering for a Graduate Apprenticeship has almost doubled. Table 4 shows the uptake by gender across the last four years. Females now account for over a third of new Graduate Apprentices.

Table 4: GA uptake by gender

	201	7-18	2018-19		201	9-20	2020-21		
	No.	% total known	No.	% total known	No.	% total known	No.	% total known	
Male	227	82.2%	599	65.1%	781	67.6%	750	64.8%	
Female	*	*	321	34.9%	*	*	408	35.2%	
Prefer not to say	*	*	-	-	*	*	-	-	
Total	277	100.0%	920	100.0%	1,157	100.0%	1,158	100.0%	

The SAAB Gender Commission was established to develop recommendations and proposals to offer business-ready, practical solutions to what employers can do now, and in the future, to address any real or perceived barriers to improving gender diversity in their workforce. The Commission is looking at this specifically through the lens of apprenticeships and work-based learning. The Commission has met regularly over the past eighteen months and includes employers and representatives from education and early years, complemented by expert advice drawn in from key policy areas, where appropriate. The Gender Commission is due to report in 2021 and SAAB and SDS will carefully consider its recommendations.

Below, Table 5 shows GA uptake by gender, where known, broken down by each framework.

Table 5: GA uptake by Gender (where known) and Framework

	201	7-18	2018-19		2019-20		2020-21	
Framework	Male	Female	Male	Female	Male	Female	Male	Female
Accounting	-	-	-	-	14	24	*	31
Business Management	-	-	102	191	144	166	198	193
Business Management: Financial Services	-	-	9	11	-	-	-	-
Civil Engineering L10	11	*	84	17	109	15	80	15
Civil Engineering L8	28	7	20	*	*	*	*	*
Construction and the Built Environment		-	44	20	83	38	69	27
Cyber Security L10		*	44	10	45	*	34	*
Cyber Security L11	-	-	21	*	46	7	34	8
Data Science	-	-	13	*	26	19	43	24
Early Learning and Childcare	-	-	-	-	*	26	-	39
Engineering: Design and Manufacture	58	6	105	18	114	15	141	21
Engineering: Instrumentation, Measurement and Control	-	-	20	*	31	5	17	-
IT: Management for Business		11	35	11	36	17	25	12
IT: Software Development		23	102	27	119	36	95	30
Total	227	49	599	321	781	375	750	408

Table 6: GA uptake by framework and known gender 4-year trend

	201	7-18	2018-19		2019-20		2020-21	
Framework	Male	Female	Male	Female	Male	Female	Male	Female
Accounting	-	-	-	-	36.8%	63.2%	27.9%	72.1%
Business Management	-	-	34.8%	65.2%	46.5%	53.6%	50.6%	49.4%
Business Management: Financial Services	-	-	45.0%	55.0%	-	-	-	-
Civil Engineering L10	91.7%	8.3%	83.2%	16.8%	87.9%	12.1%	84.2%	15.8%
Civil Engineering L8		20.0%	83.3%	16.7%	83.3%	16.7%	66.7%	33.3%
Construction and the Built Environment		-	68.8%	31.3%	68.6%	31.4%	71.9%	28.1%
Cyber Security L10	83.3%	16.7%	81.5%	18.5%	90.0%	10.0%	82.9%	17.1%
Cyber Security L11	-	-	84.0%	16.0%	86.8%	13.2%	81.0%	19.1%
Data Science	-	-	76.5%	23.5%	57.8%	42.2%	64.2%	35.8%
Early Learning and Childcare	-	-	-	-	13.3%	86.7%	-	100.0%
Engineering: Design and Manufacture	90.6%	9.4%	85.4%	14.6%	88.4%	11.6%	87.0%	13.0%
Engineering: Instrumentation, Measurement and Control		-	83.3%	16.7%	86.1%	13.9%	100.0%	-
IT: Management for Business		17.2%	76.1%	23.9%	67.9%	32.1%	67.6%	32.4%
IT: Software Development	75.8%	24.2%	79.1%	20.9%	76.8%	23.2%	76.0%	24.0%

The Business Management framework remains a popular choice for females with nearly half of all registered female GAs choosing to study this in 2020/21. The Early Learning and Childcare framework saw the second highest uptake for females with no males choosing to study this.

In the Data Science framework, female participation has increased year on year. In 2020/21, females represented 35.8% of all individuals starting a GA in Data Science. As a point of reference, the percentage of women in the UK who occupy roles in digital technology has also increased, rising from 18%<sup>10</sup> in 2014/15 to 23%<sup>11</sup> in 2020/21.

Engineering: Instrumentation, Measure and Control was the only framework which saw no female uptake in 2020/21, despite the gender balance in this framework showing an improvement last year.

Table 6 shows the gender balance as a proportion of cohort size for each year. In 2020/21, the largest increases in the proportion of registered females were seen in Early Learning and Childcare (+13.3pp), Accounting (+8.9pp), and Cyber Security (+7.1pp) at SCQF Level 10. Proportionately, Civil Engineering at level 8 also looks strong for females but this is because the number of total participants is very low.

<sup>10</sup> https://www.skillsdevelopmentscotland.co.uk/media/42478/tackling-the-technology-gender-gap-together-2.pdf/page3

<sup>11</sup> https://www.skillsdevelopmentscotland.co.uk/media/46258/scotlands-digital-technologies-summary-report.pdf/page14

#### **STEM Frameworks**

Based on the current definition of science, technology, engineering or maths (STEM) related frameworks, as agreed with Scottish Government, 10 of the 13 GA frameworks may be classed as STEM. Those **not** fulfilling the current STEM criteria are:

E Accounting

**Business Management** 

Early Learning and Childcare

There is a specific focus on the proportion of females in STEM related study and employment. Figure 6 shows that the proportion of females undertaking a GA in a STEM framework has risen year-on-year, increasing by 3.1pp since 2017/18.

Females were most prominent in the following STEM frameworks:

Data Science (35.8%)

IT: Management for Business (32.4%)

Construction and the Built Environment (28.1%)

Figure 6: Proportion of females undertaking a STEM related GA

 
 % of female GAs in STEM related subjects
 19.6%
 20.2%
 21.2%

 2017-18
 2018-19
 2019-20
 2020-21

#### Equality

Equality and inclusion are integral to the promotion of Graduate Apprenticeships. Communicating the benefits of apprenticeships has long been underpinned by SDS' aim to encourage more uptake from individuals from under-represented groups.

Scottish Apprenticeship Week, coordinated by SDS and supported by a range of stakeholders across the country, provides a platform for diversity and inclusion. The 2020 campaign – with the strapline 'Talent Without Limits' – celebrated the diversity that makes Scottish Apprenticeships good for individuals, employers, and the economy. SDS' 2021 campaign 'Business Backing Talent' further reinforced this by demonstrating how businesses benefit when they back talent and diversity through apprenticeships.

The Scottish Apprenticeship Awards continue to promote inclusive recruitment, giving recognition and promotion to businesses who have demonstrated a commitment to diversifying their workforce. The Awards provide us with an opportunity to promote and share good practice amongst employers.

Data on equality characteristics of Graduate and Higher Apprenticeship participants is collected on a self-reported basis through the participant registration form.

All learning providers are now inputting GA registration data into our FIPS system. For completeness, this has been done retrospectively for 2017/18 and 2018/19 data by all learning providers, bar one. To maintain the robustness of the data we now have, we have excluded one learning provider's apprentices from disability, ethnicity, and care experience tables for 2017/18 and 2018/19. This means that the total GA starts figures may differ in tables 6, 7 and 8.

#### **Disability**

The proportion of GAs self-declaring an impairment, health condition or learning disability is shown in Table 7.

This year, there has been a slight decrease in individuals self- declaring an impairment, health condition or learning disability. This is a shift from previous years where these figures increased year on year.

Table 7: GA uptake by known self-identified disability status

	201	17-18	201	8-19	201	9-20	202	0-21
	No.	% total known	No.	% total known	No.	% total known	No.	% total known
Disabled	19	7.6%	69	7.7%	113	9.9%	109	9.7%
Not disabled	230	92.3%	819	92.2%	1,027	90.1%	1,019	90.3%
Prefer not to say	11	-	20	-	17	-	30	-
Total	<b>260</b> <sup>12</sup>	100.0%	<b>908</b> <sup>13</sup>	100.0%	1,157	100.0%	1,158	100.0%

#### **Ethnicity**

There has been an increase in the number of registered GAs selfidentifying as minority ethnic (+0.8pp since 2019/20). At 5.2%, this is more than reflective of the proportion of minority ethnic groups within the working age population in Scotland.

This year, minority ethnic representation was highest in the Early Learning and Childcare framework, closely followed by the IT: Software Development framework. Table 8 shows the breakdown of GAs by ethnicity.

Of the 13 frameworks available this year, there was no minority ethnic representation in the following 3 frameworks:

- - **Civil Engineering Level 8**
- **Civil Engineering Level 10**
- **Construction and the Built Environment**

Table 8: GA uptake by known self-identified ethnicity

	201	7-18	201	8-19	201	9-20	202	0-21
	No.	% total known	No.	% total known	No.	% total known	No.	% total known
Minority ethnic <sup>14</sup>	*	*	31	3.5%	50	4.4%	59	5.2%
White	246	96.1%	858	96.5%	1,099	95.6%	1,086	94.8%
Prefer not to say	*	*	19	-	8	-	13	-
Total	<b>260</b> <sup>15</sup>	100.0%	<b>908</b> <sup>16</sup>	100.0%	1,157	100.0%	1,158	100.0%

- 12 Self-identified disability status is unknown for GAs from 1 provider for 2017/18
- 13 Self-identified disability status is unknown for GAs from 1 provider for 2018/19
- 14 Mixed or Multiple; Asian; African; Caribbean or Black; Arab; and Other ethnic group
- 15 Self-identified ethnicity status is unknown for GAs from 1 provider for 2017/18
- 16 Self-identified ethnicity status is unknown for GAs from 1 provider 2018/19

#### **Care Experience**

The proportion of registered GAs self-identifying care experience has remained static. The breakdown of GA starts by self-identified care experience is shown in Table 9.

Table 9: GA uptake by self-identified care experience

	201	7-18	2018-19		2019-20		2020-21	
Care Experience	No.	% total known	No.	% total known	No.	% total known	No.	% total known
Yes	-	-	*	*	5	0.4%	5	0.4%
No	251	100.0%	843	99.6%	1,133	99.6%	1,132	99.6%
Prefer not to say	9	-	*	*	19	-	21	-
Total	<b>260</b> <sup>17</sup>	100.0%	<b>908</b> <sup>18</sup>	100.0%	1,157	100.0%	1,158	100.0%

#### **Local Authority**

For an individual to be eligible to undertake a GA, they must have the right to live and work in the United Kingdom and their working premises must be in Scotland.

The table in **Annex 2** shows GA uptake since 2017/18, based on the home address of the apprentice and the office address of their respective employer.

It is important to note that individuals may travel from their home local authority to work with an employer based in a different local authority. For example, in 2020/21, 10.5% of GAs resided in Glasgow City but 24.2% of GAs worked with an employer based in Glasgow City.

Like 2019/20, all local authorities in Scotland are represented, with the highest number of GA opportunities being realised in Glasgow City. This year, for the first time, no local authority had less than 5 GAs registered across participating employers, and only three local authorities had less than 10 GAs in total.

#### Across each year of intake, the highest % of GAs lived in:

Figure 7:



Across each year of intake, the highest % of GAs were with employers based in:

Figure 8:



2018-19

28.5% Glasgow City
13.4% City of Edinburgh
7.2% Aberdeen City
6.1% Dundee City
4.0% Highland

19.8% City of Edinburgh18.4% Glasgow City9.2% North Lanarkshire7.7% Aberdeen City5.7% Fife



24.2 2020-21 2020-21

22.8% Glasgow City16.6% City of Edinburgh7.8% Aberdeen City6.7% North Lanarkshire4.4% Fife



#### **Scottish Index of Multiple Deprivation**

The Scottish Index of Multiple Deprivation<sup>19</sup> (SIMD, 2020) is a tool used to identify geographical areas that may need enhanced support or resources. It was updated in 2020, replacing the previous SIMD that was based on 2016 data. The index uses a combination of financial and socio-economic measures to understand the relative deprivation of areas across Scotland.

It is important to note that SIMD focuses on deprived areas and that it does not directly relate to individuals. Not all individuals who live in a deprived area will be deprived and, on balance, there may be deprived individuals living in the least deprived areas. Additionally, in this context, 'deprived' refers to those with limited access to resources and opportunities.<sup>20</sup>

Analysis of GA uptake by SIMD involved matching apprentice home address postcodes to SIMD data. Scores are on a scale of 1 to 10, where 1 is within the 10% most deprived areas and 10 is within the 10% least deprived areas. Table 10 provides a breakdown of uptake by SIMD area for cohort 3 (2019/20) and cohort 4 (2020/21). Table 10: GA uptake by SIMD area for cohorts 3 (2019/20) and 4 (2020/21)

SIMD area	No. of GAs 2019-20	% of total	No. of GAs 2020-21	% of total
1	80	6.9%	64	5.6%
2	67	5.8%	87	7.6%
3	85	7.4%	80	7.0%
4	118	10.2%	111	9.7%
5	101	8.7%	130	11.4%
6	111	9.6%	122	10.7%
7	156	13.5%	147	12.9%
8	161	13.9%	149	13.0%
9	160	13.8%	151	13.2%
10	118	10.2%	103	9.0%
Total	1,157	100.0%	<b>1,144</b> <sup>21</sup>	100.0%

In 2020/21, there was a decrease in uptake of GA opportunities in the most deprived areas in Scotland (SIMD 1) while SIMD 2 areas saw an increase (20) in those taking up a Graduate Apprenticeship. Relative to last year, there was a decrease in the uptake of GAs in the least deprived areas (SIMD 9 and SIMD 10), while SIMD 5 areas have seen the biggest increase.

20 https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/pages/02/

21 For 2020-21, there were 14 apprentice post codes that were excluded due to them being invalid or situated outside SIMD areas.

This means that the total is 14 less than the number of registered GAs for that year.

**<sup>19</sup>** <u>https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/</u>

### **GAs currently in training**

Graduate Apprenticeships are structured around a degree programme. Most degrees are completed by individuals over a 4-year period. It is for this reason that we would expect many registered GAs to still be in training. However, the Higher Apprenticeship (Civil Engineering at SCQF level 8) only takes 2 years to complete. Those who started studying for this qualification in cohorts 1 and 2 (2017/18 and 2018/19) should now have finished their study.

As there are also instances where recognition of prior learning has allowed some GAs to accelerate their studies and begin in 2nd, 3rd or 4th year, we would also expect some of these individuals to have completed.

There are some cases where apprentices may leave their studies early with partial or no achievement. There are a variety of reasons why an individual may make this decision. Table 11 shows the number and proportion of individuals still in training for each cohort year. As more individuals come to the end of their training, we expect these numbers to drop. Those who started their GA in 2017/18 should all be due to graduate in 2021, unless their study has been deferred.

Of those who began their GA in 2020/21, there were 1,113 still in training, with 44 early leavers. The number of individuals made redundant during the COVID-19 pandemic remained very low, affecting less than 1% of Graduate Apprentices.

Table 11: GAs in training (as at 26th May 2021)

	2017-18		2018-19		201	9-20	2020-21		
	No.	% of all GAs	No.	% of all GAs	No.	% of all GAs	No.	% of all GAs	
Still in Training	142	51.3%	644	70.0%	969	83.8%	1,113	96.1%	

### **Early leavers**

A Graduate Apprentice is categorised as an early leaver if they leave their apprenticeship before achieving the full qualification they were registered for. Early leavers also include those who exit at a recognised point (e.g. achieve a qualification at SCQF level 9 rather than 10).

Table 12 shows the number and proportion of GAs who are classified as early leavers for each cohort.

Table 12: Early leavers<sup>22</sup>

	2017-18	2018-19	2019-20	2020-21
No of registered GAs	277	920	1,157	1,158
Early Leavers with partial achievement	53	98	18	-
Early Leavers with no achievement	27	130	166	44
Total no of early leavers	80	228	184	44
Total early leavers as % of registered GAs	28.9%	24.8%	15.9%	3.8%

Early leavers, as a percentage of registered GAs is decreasing year on year. This is partly due to the elapsed time for each cohort, as would be expected, but may also reflect the continued evolution and maturity of Graduate Apprenticeships. Apprentices who started their study in cohort 1 (2017/18) should be due to graduate in Summer 2021 so we do not anticipate early leaver rates increasing much beyond 28.9%. We recognise that, among the early leavers, there are individuals who have left their study at a recognised exit point. This means that, although they may not have achieved their full Graduate Apprenticeship, they have gained components of the degree.

Table 12 splits early leavers into those that have left at a recognised exit point (those with partial achievement) and those who left early with no achievement. We are currently unable to report whether universities have certificated partial achievements (for example a Higher National Diploma or an ordinary degree) but will continue to work with partners to understand how this might be possible in future.

Across all cohorts, a total of 169 GAs left their study early, having achieved a component of their qualification.

Table 13: Early Leavers by Age

		2017-18		2018-19				2019-20		2020-21		
	No.	% early leavers	% total GAs	No.	% early leavers	% total GAs	No.	% early leavers	% total GAs	No.	% early leavers	% total GAs
16-19	*	*	*	21	9.2%	2.3%	*	*	1.9%	*	*	*
20-24	25	31.3%	9.0%	63	27.6%	6.8%	47	25.5%	4.1%	9	20.5%	0.7%
25-34	23	28.8%	8.3%	64	28.1%	7.0%	63	34.2%	5.4%	16	36.4%	1.4%
35-49	22	27.5%	7.9%	72	31.6%	7.8%	48	26.1%	4.1%	12	27.3%	1.0%
50+	*	*	*	8	3.5%	0.9%	*	*	0.3%	*	*	*
Total	80	100.0%	-	228	100.0%	-	184	100.0%	-	44	100.0%	-

The greatest number and proportion of early leavers are from the 25-34 age band for both 2019/20 and 2020/21. This may be expected as the 25-34 age band has the highest level of uptake, but we will continue to monitor this for each cohort.

Table 14: Early Leavers by Gender

	2017-18			2018-19				2019-20		2020-21			
	No	As % total early leavers	As % total M/F GAs	No	As % total early leavers	As % total M/F GAs	No	As % total early leavers	As % total M/F GAs	No	As % total early leavers	As % total M/F GAs	
Male	66	82.5%	23.8%	153	67.1%	25.5%	135	73.4%	17.3%	28	63.6%	3.6%	
Female	14	17.5%	28.6%	75	32.9%	23.4%	49%	26.6%	13.1%	16	36.4%	4.3%	
Total	80	100.0%	-	228	100.0%	-	184	100.0%	-	44	100.0%	-	

Across the last two years, males have been more likely to leave their studies than females, 73.4% in 2019/20 and a decrease to 63.6% in 2020/21. However, female early leavers as a proportion of total female GAs is higher than that for males, as shown in Table 14.

Table 15: Early Leavers by framework, relative to GA uptake

	2017-18		201	8-19	2019-20		2020-21	
	No	% uptake	No	% uptake	No	% uptake	No	% uptake
Accounting	-	-	-	-	2	5.3%	*	*
Business Management	-	-	79	27.0%	57	18.4%	15	3.8%
Business Management: Financial Services	-	-	7	35.0%	-	-	-	-
Civil Engineering L10	*	*	27	26.7%	25	20.2%	*	*
Civil Engineering L8	15	42.9%	14	58.3%	*	*	-	-
Construction and the Built Environment	-	-	11	17.2%	11	9.1%	5	5.2%
Cyber Security L10	*	*	13	24.1%	19	38.0%	6	14.6%
Cyber Security L11	-	-	6	24.1%	6	11.3%	*	*
Data Science	-	-	-	-	9	19.6%	*	*
Early Learning and Childcare	-	-	-	-	*	*	-	-
Engineering: Design and Manufacture	15	23.4%	22	17.9%	17	13.2%	10	6.2%
Engineering: Instrumentation, Measure and Control	-	-	7	29.2%	10	27.8%	-	-
IT: Management for Business	21	32.3%	21	45.7%	7	13.5%	-	-
IT: Software Development	26	27.4%	21	16.3%	16	10.3%	*	*
Total	80	-	228	-	184	-	44	-

In 2019/20 and 2020/21, Cyber Security at SCQF Level 10 has experienced the greatest proportion of early leavers, relative to uptake, at 38.0% and 14.6% respectively.

### **Reasons for leaving early**

The most common reasons given by Graduate Apprentices who have chosen to leave their studies early are:

- Personal reasons
- Difficulties with workload
- Course no longer relates to plans

### Achievers

Graduate Apprentices who complete their full qualification and finish by the expected end date are defined as achievers, achieving all components of their GA.

Other than Civil Engineering at level 8 taking two years to complete and Early Learning and Childcare at level 9 taking 3 years to complete, all GA frameworks are 4-year degree programmes. This means that, to date, very small numbers are likely to have achieved their full GA. Those who have will tend to be those who were able to start their studies at an advanced entry point due to RPL.

Table 16 shows a breakdown of achievers by each GA framework. Historically, the framework with the highest number of achievers across each cohort have studied IT: Software Development.

Table 17 shows a breakdown of achievers by registered learning provider. Across all cohorts, Glasgow Caledonian University is the learning provider which has seen the highest number of GAs achieve their degree, to date.

#### Table 16: Achievers by Framework

	No. of Achievers							
Framework	2017-18	2018-19	2019-20	2020-21				
Business Management	-	7	-	-				
Civil Engineering L10	-	6	-	-				
Civil Engineering L8	19	*	-	-				
Cyber Security L10	-	*	-	-				
Cyber Security L11	-	16	-	-				
Engineering: Design and Manufacture	13	*	-	-				
IT: Management for Business	5	-	-	-				
IT: Software Development	18	14	*	-				
Total Achievers	55	47	*	-				

#### Table 17: Achievers by Learning Provider

	No. of Achievers						
Learning Provider	2017-18	2018-19	2019-20	2020-21			
Glasgow Caledonian University	21	31	*	-			
Glasgow Kelvin College	10	-	-	-			
Heriot-Watt University	*	*	-	-			
The Open University	-	6	-	-			
University of the Highlands and Islands	9	8	-	-			
University of the West of Scotland	11	*	-	-			
Total Achievers	55	47	*	-			

#### Table 18 provides a summary of the status of all GAs, to date.

#### Table 18: Status of all GAs<sup>23</sup>

	2017-18		2018-19		20	19-20	2020-21		
	No.	% of all GAs	No.	% of all GAs	No.	% of all GAs	No.	% of all GAs	
Achievers	55	19.9%	47	5.1%	*	*	-	-	
Partial Achievers	53	19.1%	98	10.7%	18	1.6%	-	-	
Early Leavers	27	9.7%	130	14.1%	166	14.3%	44	3.8%	
Still in Training	142	51.3%	644	70.0%	969	83.8%	1,113	96.1%	
Made Redundant	-	-	1	0.1%	*	*	1	0.1%	
Total GAs	277	100.0%	920	100.0%	1,157	100.0%	1,158	100.0%	

23 As we do not provide any other information regarding redundancies, making individuals impossible to identify, numbers have been included in this table – even though they are less than 5.

# Learner experience: Business Management

Graduate Apprentice Nicole Wallace has used her training to help employer Standard Life Aberdeen adapt to the challenges of COVID-19.

The 21-year-old previously completed a Modern Apprenticeship in Digital Application Support before securing her dream role as Talent and Change Coordinator at Standard Life Aberdeen, alongside the opportunity to complete a Graduate Apprenticeship in Business Management through Robert Gordon University.

Over lockdown, Nicole supported a project to create digital learning materials for Standard Life Aberdeen's new apprentices, enabling them to join the business virtually.

As well as benefitting other learners, Nicole believes her pathway has given her the perfect start to a long and successful career.

Nicole said: "I've fallen in love with what I do and that's thanks to the journey I've been on. Now I've the opportunity to sit my Graduate Apprenticeship, so it means I've had the best of both worlds.

"I'm getting real-life working experience, earning a great wage, I've met some amazing people and now I'm halfway through a degree. So I've had the best experience I could've possibly ever had."

As a champion for work-based learning, Nicole regularly promotes apprenticeships to young people and was shortlisted as a finalist in the Apprentice Ambassador of the Year category at the Scottish Apprenticeship Awards in March 2021.



**Nicole Wallace**, Graduate Apprentice



# Learner experience: IT: Software Development

21-year-old David Scott chose an IT: Software Development Graduate Apprenticeship with Aviva through the University of the West of Scotland (UWS) as he believes it was a "great fit" for his career aspirations.

Since joining Aviva's team in Perth, David has played a key role in the upgrade of a crucial company-wide software system. His ability to think fast, act decisively and problem solve ensured the successful delivery of the Guidewire Upgrade last year.

In addition to his technical prowess, David was also recently nominated for the Top 100 LGBT+ Future Leader category in Yahoo Finance's 'Outstanding Awards' and arranges many social and panel events throughout the Aviva Pride calendar.

David, who previously completed a Modern Apprenticeship at East Dunbartonshire Council, said: "I aspired to earn more qualifications while continuing to build my career – a Graduate Apprenticeship at Aviva was the perfect next step to do that. I'm getting exposure to lots of different aspects of IT, while studying for a degree. I love my diversity and inclusion work and we have some great initiatives at Aviva. I was proud to be nominated for the LGBT Future Leader award."

David has a long-term ambition to become a Senior Leader within the IT Industry and his commitment and dedication led to him being recognised as a finalist in the Graduate Apprentice of the Year category at the Scottish Apprenticeship Awards in March 2021.

As a member of Scotland's Apprentice Network, David recognises the importance of work-based learning and is keen to support future generations of apprentices.

He added: "I've also been doing work at local secondary schools with Developing the Young Workforce. When I was at school and considering what I wanted to do, I'd have loved to be able to chat to an apprentice. If I can provide clarity for others – great!"



#### David Scott, Graduate Apprentice



# Learner experience: Engineering: Design and Manufacture

Cameron MacDonald says he is now fulfilling his academic potential through his Graduate Apprenticeship with global drinks giants, Diageo.

After the 21-year-old from Bathgate completed his Modern Apprenticeship in electrical engineering, he was offered a permanent role at Diageo's base in Alloa.

Now he is combining that job with a Graduate Apprenticeship that will ultimately lead to a degree in Engineering: Electrical Design and Manufacture at Heriot-Watt University.

Cameron said: "When I finished my Modern Apprenticeship, I was put into a full-time position and I'm now Operational Technology Lead alongside my Graduate Apprenticeship.

"Within that, I'm working mostly on control systems and with the global engineering team on cyber security.

"Diageo wanted to get me into a position where the company benefits and I do too. This work is at the required level to match the degree I'm doing. We are currently in the process of upgrading a lot of systems, so I'm directly involved in that.

"I had started to lose interest in my academic studies at school, so to now be in a position where I'm studying for a degree at university is unbelievable and something I'm really proud of – I wouldn't have been able to have done that if it wasn't through a Graduate Apprenticeship."



Cameron MacDonald, Graduate Apprentice

DIAGEO

# **High Performing Businesses**

### **Employment Status of GAs**

Understanding the employment status of participants allows us to examine how Graduate Apprenticeships are being utilised, by individuals and employers. Since the introduction of Graduate Apprenticeships, the common trend is that positions are more likely to be taken up by those who are existing employees, as opposed to new members of staff. This would suggest that Graduate Apprenticeships are predominantly being used as a means for individuals and employers to progress or upskill, to meet business need. This was reflected in data from this academic year as, out of 1,158 opportunities realised, 1,033 of these were realised by existing employees. However, in 2020/21 part of this may be due to the lack of new recruitment activity, generally, during the COVID-19 pandemic. Table 19 shows the variation of employment status, across frameworks for each intake. This year, Civil Engineering Level 8 and Engineering: Instrumentation, Measure and Control were two frameworks which were occupied fully by existing employees. The framework which saw the biggest intake of new talent in 2020/21 was the IT: Software Development framework. This is a shift from the last academic year as the Early Learning and Childcare framework previously attracted the highest number of new talent.



Figure 9: Graduate Apprentices - Employment Status<sup>24</sup>

24 Note that since the previous report, employment status data is more complete and, therefore, more representative of all GAs. Improved data validation within FIPS has enabled better capture of this data and there is now only 0.5% of GAs that we do not have this data for. Table 19: % GA uptake by employment status (by framework)

	201	7-18	201	8-19	201	9-20	<b>2020-21</b> <sup>25</sup>	
	Upskill	New Talent	Upskill	New Talent	Upskill	New Talent	Upskill	New Talent
Accounting	-	-	-	-	79.0%	21.1%	72.1%	27.9%
Business Management	-	-	96.6%	3.4%	95.5%	4.5%	97.4%	2.6%
Business Management: Financial Services	-	-	100.0%	-	-	-	-	-
Civil Engineering L10	91.7%	8.3%	89.1%	10.9%	88.7%	11.3%	89.5%	10.5%
Civil Engineering L8	100.0%	-	100.0%	-	91.7%	8.3%	100.0%	-
Construction and the Built Environment	-	-	85.9%	14.1%	81.0%	19.0%	85.4%	14.6%
Cyber Security L10	100.0%	-	79.6%	20.4%	96.0%	4.0%	85.4%	14.6%
Cyber Security L11	-	-	100.0%	-	100.0%	-	95.2%	4.8%
Data Science	-	-	58.8%	41.2%	77.8%	22.2%	85.1%	14.9%
Early Learning and Childcare	-	-	-	-	56.7%	43.3%	92.3%	7.7%
Engineering: Design and Manufacture	93.8%	6.3%	98.4%	1.6%	93.0%	7.0%	95.1%	4.9%
Engineering: Instrumentation, Measurement and Control	-	-	100.0%	-	86.1%	13.9%	100.0%	-
IT: Management for Business	93.9%	6.2%	87.0 %	13.0%	86.8%	13.2%	91.9%	8.1%
IT: Software Development	63.2%	36.8%	87.6%	12.4%	80.1%	19.9%	63.4%	36.6%
Total	83.1%	16.9%	<b>92.1</b> %	<b>7.9</b> %	<b>88.2</b> %	11.8%	89.4%	10.6%

IT: Software Development was one of two frameworks to see an increase in the number of new recruits from last year to this year. This is potentially due to the higher number of 16-19 year olds undertaking a GA in this framework, as they are more likely to be entering the labour market at that age. See **Annex 1** for uptake by framework and age band.

Most other frameworks have a greater emphasis on progressing/upskilling existing staff, with Business Management, Civil Engineering Level 8 and Engineering: Instrumentation, Measurement and Control all having in excess of 97% of uptake being existing employees.

25 A small number of GAs registered on IT: Software Development had no employment status logged.

### **GA Employers**

GA employers can be of any size and based anywhere in Scotland. The number of GA employers has increased year-on-year, rising from 140 to 500 over the four years. **Note that we have undertaken a thorough cleansing exercise to improve the quality of employer data in FIPS.** This means that figures in this report do not correlate with those from the previous publication.

Figure 10: No. of GA employers



In 2017/18, most businesses employed one or two Graduate Apprentices. In 2020/21, 35% of employers had multiple GAs and there are now over 30 employers with more than 20 Graduate Apprentices working for them. Of those, one large multi-national company registered 57 Graduate Apprentices.

Around 38% of employers who were engaged in GA delivery in 2019/20 took on additional apprentices in 2020/21, 2pp less than the previous year.

There are now 32 employers that have registered at least one Graduate Apprentice in each of the 4 years that GA has been running.

#### Location of GA Employers

As a business can operate from multiple sites, the number of employers by local authority is greater than the number of distinct employers.

In 2020/21, 31 employers had sites in more than one local authority area, meaning the total number of business, as shown in Table 20, when broken down by Local Authority, is higher than those in Figure 11.<sup>26</sup>

Table 20: GA employers by local authority (continues on next page)

	20	17-18	2018-19 2019-20		19-20	20	20-21	
	No.	% total	No.	% total	No.	% total	No.	% total
Aberdeen City	9	5.8%	29	6.8%	52	9.4%	53	9.5%
Aberdeenshire	*	0.6%	18	4.2%	26	4.7%	25	4.5%
Angus	*	*	7	1.6%	10	1.8%	10	1.8%
Argyll & Bute	*	*	*	*	6	1.1%	6	1.1%
Clackmannanshire	-	-	*	*	*	*	*	*
Comhairle nan Eilean Siar	*	*	*	*	*	*	*	*
Dumfries and Galloway	*	*	7	1.6%	9	1.6%	7	1.3%
Dundee City	7	4.5%	12	2.8%	16	2.9%	27	4.8%
East Ayrshire	*	*	8	1.9%	8	1.5%	*	*
East Dunbartonshire	*	*	*	*	*	*	*	*
East Lothian	*	*	*	*	5	0.9%		
East Renfrewshire	-	-	*	*	*	*	*	*

26 In a small number of instances, employer local authority was not captured in our system data. These have been recorded as unknown in the table.

Table 20: GA employers by local authority (continued)

	20	17-18	20	18-19	20	19-20	20	20-21
	No.	% total						
Edinburgh, City of	22	14.2%	74	17.4%	82	14.9%	69	12.3%
Falkirk	5	3.2%	10	2.4%	7	1.3%	13	2.3%
Fife	6	3.9%	22	5.2%	24	4.4%	30	5.4%
Glasgow City	35	22.6%	66	15.5%	94	17.1%	84	14.8%
Highland	9	5.8%	9	2.1%	20	3.6%	26	4.7%
Inverclyde	*	*	*	*	7	1.3%	*	*
Midlothian	-	-	8	1.9%	9	1.6%	5	0.9%
Moray	*	*	8	1.9%	9	1.6%	7	1.3%
North Ayrshire	*	*	17	4.0%	9	1.6%	7	1.3%
North Lanarkshire	9	5.8%	32	7.5%	27	4.9%	41	7.3%
Orkney Islands	-	-	6	1.4%	5	0.9%	5	0.9%
Perth & Kinross	*	*	6	1.4%	10	1.8%	12	2.1%
Renfrewshire	5	3.2%	14	3.3%	22	4.0%	23	4.1%
Scottish Borders	*	*	6	1.4%	14	2.5%	11	2.0%
Shetland Islands	*	*	*	*	5	0.9%	5	0.9%
South Ayrshire	*	*	10	2.4%	8	1.5%	8	1.4%
South Lanarkshire	*	*	12	2.8%	16	2.9%	20	3.6%
Stirling	*	*	8	1.9%	13	2.4%	14	2.5%
West Dunbartonshire	*	*	*	*	7	1.3%	5	0.9%
West Lothian	5	3.2%	14	3.3%	16	2.9%	19	3.4%
Unknown	-	-	*	*	11	2.0%	5	0.9%
Total	155	100.0%	425	100.0%	551	100.0%	560	100.0%

All local authority areas have at least one employer with a Graduate Apprentice. Table 20 shows that, unsurprisingly, the larger urban areas continue to represent the biggest proportion of GA employers.

> "In the last five years I've used a number of routes to bring emerging talent into the Balfour Beatty Major Projects Quality team. Whilst other approaches have had success, we have achieved a far better calibre of Quality Engineer through the Graduate Apprentice route.

"The combination of on the job learning as well as academic study give the individuals the right balance between practical and theoretical knowledge but has also produced a more rounded individual."

#### **Amanda McKay**

Quality Assurance Director, Balfour Beatty

### **Supporting a Graduate Apprentice**

In a Graduate Apprenticeship, work-based learning is delivered and assessed in the workplace. Employers have a role in supporting this delivery and assessment, and individuals are expected to achieve the same academic rigour required for any degree-level programme.

Taking on a Graduate Apprentice is something that requires a commitment not just from the individual apprentice but also from the employer. To ensure that the apprentice has the best possible chance of succeeding in their apprenticeship, employers are asked to provide individuals with:

a job description and role that aligns to their studies

a contract of employment

a workplace mentor

They are also asked to allow study time for university work.

To date, Graduate Apprenticeships have attracted employers from a wide range of industries and specialisms. In 2020/21, GA opportunities were realised by individuals from 500 different employers in Scotland – up from 140 in 2017/18. Graduate Apprenticeships are designed for employers and, most importantly, with employers. We will continue to develop the GA offer and engage with businesses across Scotland to help them realise the potential of their current and future workforce through apprenticeships. "Graduate Apprenticeships are a strategic way to develop our future leaders and gain skills that are vital to the success of our business. By gaining commercial awareness alongside academic qualifications, our Graduate Apprentices have made a valuable, quantifiable difference to the organisation"

Helen Muir HR Director, Dawnfresh Seafoods

"In this industry, we always want to be looking ahead but sometimes it's difficult because of the hectic pace we face as a small business. Our Graduate Apprentices are a window into the future – a window into different ways of doing things and a catalyst for change. We will learn as much from them as they learn from us."

**Dr Diego De la Hoz** Business Director, Celestia UK



Sarah Spiers started her Graduate Apprenticeship through Glasgow Caledonian University with an employer after leaving school in September 2019. However, the impact of the pandemic led to job losses at her employer and Grangemouth-based Sarah was made redundant in October 2020.

The 18-year-old continued her apprenticeship studies at the university and found employment with an alternate employer, Arcadis, thanks to support from Skills Development Scotland and the Adopt an Apprentice programme.

Sarah said: "Being made redundant was stressful and, at the time, I felt my whole world had come crashing down, but Skills Development Scotland provided support and guidance about what to do next.

"Adopt an Apprentice helped me to continue with my Graduate Apprenticeship and the university and Skills Development Scotland were really good at making that transition as smooth as possible."

Sarah, who works in Arcadis' Rail Sector, is now progressing in her degree and would recommend the Graduate Apprenticeship route to others. She explained: "This pathway helps me to fill in knowledge gaps between theoretical university learning and 'real-life' on-the-job learning.

"I have been able to visit various construction sites, gain a working knowledge of a range of engineering software, access company funded training and have been exposed to a range of typical engineering projects.

"I would definitely recommend a Graduate Apprenticeship to anyone who was considering going to university, as it provides invaluable networking opportunities, access to additional support, advice from colleagues and the chance to earn while you learn."



#### Sarah Spiers, Graduate Apprentice



# GA Employer: JP Morgan

### Digital apprentices sustain a switched-on workforce for JP Morgan

JP Morgan believes investing in new talent is crucial in its drive to sustain its cutting-edge digital services.

In Scotland, Graduate Apprenticeships have given the financial services firm the ability to bring in enthusiastic recruits and develop them with the specific digital skills needed to support the company.

JP Morgan currently employs 45 IT Software Development Graduate Apprentices in Scotland and works in partnership with Strathclyde University to provide its recruits with a structured higher education programme of learning.

Phillip Paige, JP Morgan Executive Director and Emerging Talent Team Lead, states that the company has remained committed to investing in new talent throughout the pandemic, with the firm employing four Graduate Apprentices in 2020.

Phillip explained: "There is a constant need to keep feeding more young talent into the team in Scotland. Technology is a fast-paced environment, so it's critical to keep recruiting in this area to build on the skills we need to develop our in-house offer and what we develop in partnership with others."



Graduate Apprentices at JP Morgan in Glasgow

This year, the business also plans to significantly increase its intake of Graduate Apprentices. Phillip said: "The benefits that young people bring to JP Morgan through apprenticeships and all forms of junior recruitment can't be overstated. They are fuelling innovation and bringing in new ideas. It's so important to have fresh minds to challenge us.

"In particular, Graduate Apprentices are coming to us as a blank canvas and joining an environment where they can ask questions."

# **GA Provider: Heriot-Watt University**

### **Graduate Apprenticeships: creating pathways**

#### to success

As a founding and key provider of Graduate Apprenticeships, Heriot-Watt is proud to play a major role in the growth of GAs across the Scottish economy. We've witnessed first-hand the positive impact of these, both in upskilling existing workforces and developing young talent. Since GAs were introduced in 2017, Heriot-Watt has supported more than 170 employer partners in their GA workforce development, and we're delighted to have built a community of more than 400 Graduate Apprentices within our student family.

For a successful economic recovery post-COVID, it will be crucial to create opportunities for young people in order to tackle skills shortages and ensure that the Scottish workforce is prepared for the jobs of the future. Apprenticeships play a key role in the Government's Young Person's Guarantee initiative.

GA programmes are particularly well placed to develop the skills for jobs of the future. As well as developing skills in construction and engineering, GAs are already proving to be highly influential in developing digital skills – something which is vital as we pivot towards a more technology-based economy.

Achieving the necessary opportunities for young people within the workplace requires the collaboration of the apprenticeship family. Heriot-Watt is hugely supportive of Foundation, Modern and Graduate Apprenticeships. Over the past year we've been delighted to design and deliver sessions with Skills Development Scotland aimed at raising awareness of apprenticeship opportunities for employers. To drive the initiative forward, we've also been working closely with colleges such as Forth Valley and West Lothian promoting the wider apprenticeship family. Some of our bespoke events have been aimed at senior phase pupils and parents, highlighting the potential of apprenticeship pathways leading to fulfilling careers, while others have been designed to help employers understand the benefits that apprentices, at all levels, can bring to a company. Hearing from apprentices during these sessions brings the concept to life and demonstrates the value of apprenticeships for businesses of all sizes and in all sectors.

At Heriot-Watt we are living these values within our own GA team by welcoming, this year, Foundation Apprentices on placement from West Lothian College – an experience that has benefitted the apprentices but also, without doubt, our GA team.

We remain fully committed to encouraging employers to understand the benefits of the apprenticeship family. Graduate Apprenticeships can develop talented individuals with skills tailored to the needs of the business, ensuring that they are equipped for the challenges ahead.

**Robin Westacott** Director of Apprenticeships





# Learner experience: Cyber Security

Michael O'Neill believes his Graduate Apprenticeship with global IT and engineering company Leidos has been a 'life-hack' towards securing a long-term career in cyber security.

The 20-year-old joined Leidos as a Cyber Security Graduate Apprentice straight from St Ninian's High School in Giffnock and is now in his third year, combining work with studying at Edinburgh Napier University.

Michael said: "I think it's possibly one of the best things I've ever done. Being able to use what I'm learning in university and work, and vice versa, is just brilliant.

"For example, I had a module last year at Napier about scripting for cyber security and networks – a few weeks before I started it, we had a mini project going on at Leidos that used Python, which really helped.

"I think being in the workplace and having this job is pushing me to work harder. I think it's given me a huge incentive to try and better myself, to gain more knowledge and basically act like a big sponge with all the resources that I've got around me."

After his positive experience, Michael has become a champion of Graduate Apprenticeships and says his skillset has expanded over the past three years.

He added: "My Graduate Apprenticeship has been amazing towards my overall career development. It's been really beneficial when it comes to the soft skills such as communicating with others and working as part of a team."



#### Michael O'Neill, Graduate Apprentice



# Accreditation, quality assurance and certification

In terms of accreditation, quality assurance and certification of a Graduate Apprenticeship meets the following standards.

### Accreditation

GAs are nationally recognised, accredited qualifications. Due to this, they need to meet the same quality standards as conventional qualifications and must go through the same processes of validation.

### **Quality assurance**

As GAs are based on Higher Education provision (degrees, diplomas and certificates), they are quality assured by the Quality Assurance Agency for Higher Education (QAA). The QAA publishes The UK Quality Code for Higher Education, which sets out its expectations of HE providers in the design, description and maintenance of academic standards. All UK HE providers, or organisations that deliver HE on behalf of an HE provider, are required to adhere to this code.

SDS worked with QAA to develop complementary processes for compliance and quality, based on annual reporting. A pilot led by SDS was delivered in 2019/20 with 5 learning providers across 5 different frameworks. The pilot mapped existing quality assurance frameworks against the framework used for SDS National Training Programmes.

This strengthened employer engagement in:

- GA work-based learning design, development and delivery
- Apprentice quality assurance

### Certification

On completion of a GA, the successful apprentice will receive the award appropriate to the SCQF level achieved. In the case of levels 9, 10 and 11, completion will result in a degree in the relevant area. In the case of Higher Apprenticeships at level 8, awards may include a Diploma of Higher Education, an HND, or SVQ4.

# **Responding to Industry Need**

Scotland's workforce needs the skills to adapt and thrive in a constantly changing world of work.

SDS is committed to creating a flexible and dynamic work-based learning (WBL) system in Scotland that creates a greater balance between work-based and academic learning and provides a mechanism for employers to further develop their workforce.

Throughout the pandemic, it was critical that employers and learning providers responded quickly to the impacts of the health emergency. Technological and digital advances enabled the remote delivery of Graduate Apprenticeship learning and apprentices were able to continue working from home.

As Scotland makes progress towards recovering from the pandemic, the high quality, dynamic and flexible approach demonstrated in the delivery of Graduate Apprenticeships this year continues to support current and emerging future skills needs. The provision of these skills in key occupational areas will support an increase in the productivity of our workforce and in turn, our nation's economic recovery and growth.

### **Co-Design with Employers**

Demand for Graduate Apprenticeships is employer led. They are future-focussed, available across a spectrum of growth industries that offer strong career prospects continuing as the economy resets and recovers from COVID-19. The Scottish Apprenticeship Advisory Board has been leading the design and expansion of all apprenticeships including Graduate Apprenticeships in Scotland.

Graduate Apprenticeships are designed by employers, in partnership with learning providers. Employers take responsibility for defining the key skills and learning outcomes and Higher Education institutions develop and provide the curriculum, assessment, and quality assurance.

The Apprenticeship Approvals Group are responsible for approving all Scottish Apprenticeships. This is an employer-led group, ensuring that Scottish Apprenticeships meet the needs of employers. The approval process covers Foundation, Graduate and Modern Apprenticeships.

The SAAB Standards and Frameworks Group ensures every framework has been created in partnership with Technical Expert Groups (TEGs) made up of employers, universities, and college representatives, as well as relevant professional accreditation bodies and Sector Skills Councils.

These groups make sure that Graduate Apprenticeships align to the realities of work and reflect the key skills and knowledge apprentices should be able to demonstrate by the end of their apprenticeship.

The development of new frameworks utilises evidence such as professional standards and occupational profiles as a basis to ensure programme content aligns to job roles.

# Responding to specific industry need – technology



Scotland's tech sector contributed £4.9bn Gross Value Added (GVA) to Scotland's economy in 2019, accounting for 3.5% of total GVA , which is 40% higher than for the economy as a whole. Over 100,000 digital technology professionals are employed in Scotland with 60% of them working in the non-tech sector and supporting the growth for technology skills across other sectors such as financial services, creative industries, energy, engineering and healthcare and illustrating the importance of tech skills across Scotland's whole economy.

Forecasts identify that we need around 13,000 people each year to fill employer's technology vacancies and these are particularly in areas of growth such as cyber security, data analytics and software development roles. SDS has been working with industry to evolve the technology Apprenticeship family and now has Graduate Apprenticeships across these disciplines as well as a Graduate Apprenticeship in Business & Technology.

# Responding to specific industry need – early learning and childcare



Scotland's early learning and childcare sector makes a significant contribution to Scotland's economy. It contributes £650 million a year to the economy in terms of gross value add and offers high quality jobs for thousands across the country. The sector plays an important role in giving Scotland's children the best possible start in life and is well proven to support attainment and in turn, help tackle poverty.

The forecasts for the long term (2023-2030) highlight that jobs growth will continue in the sector. It is also expected that there could be an ongoing requirement for skilled people to fill opportunities created by people leaving the labour market. The early learning and childcare sector is forecast to have a need for 9,500 people to fill job openings between 2023-2030. As a result, SDS has worked with industry to create Graduate Apprenticeships in Early Learning and Childcare.

### Developing skills for the future

To ensure that individuals, businesses, the economy and society can recover and grow, we all need to develop new skills.

We will require a blend of up-skilling and re-skilling, where our 'new normal' has caused paradigm shifts in how businesses operate, and individuals interact.

More than ever, we need to enhance skills in individuals that cannot be automated (referred to as meta-skills) to create adaptive, resilient learners and promote success in whatever context the future offers.

Graduate Apprenticeships offer businesses and individuals the opportunity to access relevant learning in critical skills areas, while also developing the meta-skills that will help them continue to progress.

### Integrating meta-skills into GA design

The importance of meta-skills development within GAs has gained significant momentum during the COVID-19 pandemic, as the adaptability and resilience of learners have become increasingly tested.

Pilot delivery of GA frameworks, incorporating meta-skills has been introduced to the GA in Accounting at SCQF level 10 and 11 (combining an honours degree with a professional qualification) delivered by Robert Gordon University and the GA in Early Years Learning and Childcare at SCQF level 9, delivered by University of the West of Scotland and University of the Highlands and Islands.

During 2020, meta-skills pilots were expanded to include IT Software and Data Science subject areas.

Findings from the pilot work will be further shared between stakeholders and partners to influence ongoing embedding of meta-skills within the development of apprenticeships.

#### **Developing additional pathways**

Two additional pathways within the Business Management GA are being developed for Project Management and for Business Analysis/ Business Process Improvement. These pathways have been cocreated by employers and employees from both private and public sectors working with trade union and university partners.

# **Looking Forward**

The Scottish Government has identified that work-based learning is a critical component in supporting Scotland's economic recovery from the pandemic.

Graduate Apprenticeships support the Scottish Government's Young Person's Guarantee, by supporting more pathways and opportunities for young people.

Continued and increasing demand for Graduate Apprenticeships evidences how valued they are by employers and many now feature GAs as an integral component in their skills development plans.

Recognising the volatile and unpredictable nature of the labour market, all GA developments will have meta-skills fully embedded. The development of these is supported by both the learning provider and, most importantly, the employer.

In addition to this, there will be further investigation into how GAs might support climate emergency and sustainable practise. The intention is that this will be integrated into future developments, within GA framework content and individual practise, to support an overall change in industrial process and employee behaviour.

In partnership with employers and the Scottish Apprenticeship Advisory Board, we will continue to drive the development of Graduate Apprenticeships so that they remain accessible and relevant for a growing range of employers. We will also progress the development of additional pathways to provide even more permeability between Graduate Apprenticeships and other professional and technical qualifications. Across the apprenticeship family a greater focus will be given to the identification of shared or transferable skills to ensure that individuals and employers are able to use apprenticeships as a progressive model of skills building and learning. This will be vital as the industrial landscape re-shapes post-COVID and Industry 4.0 becomes a reality.

In line with our plans to embed and mainstream GAs within the education system, we will be working extremely closely with colleagues at the Scottish Funding Council. We are optimistic about the opportunities that mainstreaming will bring for Graduate Apprenticeships, giving them greater visibility in the wider skills system and embedding them as an integral part of the Higher Education offer in Scotland.

Our close partnership with the Scottish Funding Council will support the continued delivery of a high quality learner and employer Graduate Apprenticeship experience.

As part of this, we will work with employers to ensure that GAs contribute to the ambition of the Young Person's Guarantee and support more young people into Graduate Apprenticeship positions after leaving school.

# **Annex 1: GA uptake by framework and age band**

			201	7-18			2018-19							2019	9-20			_	2020-21					
<b>CA</b> (												Age	bands	;										
GA framework	16-19	20-24	25-34	35+	50+	Total	16-19	20-24	25-34	35-49	50+	Total	16-19	20-24	25-34	35-49	50+	Total	16-19	20-24	25-34	35-49	50+	Total
Accounting	-	-	-	-	-	-	-	-	-	-	-	-	14	*	9	*	-	38	10	11	11	*	*	43
Business Management	-	-	-	-	-	-	20	47	79	133	14	293	24	62	115	100	9	310	34	65	150	128	14	391
Business Management: Financial Services	-	-	-	-	-	-	*	7	6	*	-	20	-	-	-	-	-	-	-	-	-	-	-	-
Civil Engineering L10	*	9	*	-	-	12	18	43	30	10	-	101	34	54	27	9	-	124	25	38	21	11	-	95
Civil Engineering L8	*	21	*	*	-	35	7	9	8	-	-	24	*	9	-	*	*	12	-	*	*		*	3
Construction and the Built Environment	-	-	-	-	-	-	22	20	13	*	*	64	39	37	36	9	-	121	18	34	28	*	*	96
Cyber Security L10	-	*	*	*	-	6	*	18	10	18	*	54	*	13	15	17	*	50	*	17	12	6	*	41
Cyber Security L11	-	-	-	-	-	-	-	*	*	11	6	25	-	*	13	30	*	53	-	*	19	14	*	42
Data Science	-	-	-	-	-	-	*	*	-	-	-	17	11	*	14	13	*	46	10	*	28	18	*	67
Early Learning and Childcare	-	-	-	-	-	-	-	-	-	-	-	-	9	5	9	7	-	30	6	5	11	12	5	39
Engineering: Design and Manufacture	*	28	23	*	-	64	22	52	35	14	-	123	19	34	46	30	-	129	26	50	70	*	*	162
Engineering: Instrumentation, Measurement and Control	-	-	-	-	-	-	*	*	*	7	-	24	*	6	19	8	*	36	*	*	*	5	-	17
IT: Management for Business	13	*	15	25	*	65	*	18	9	13	*	46	*	15	20	12	*	52	*	*	10	14	-	37
IT: Software Development	29	36	17	*	*	95	51	43	27	8	-	129	55	35	39	22	5	156	38	35	35	17	-	125
Total	55	107	66	*	*	277	171	268	230	226	25	920	216	287	362	266	26	1,157	179	281	403	262	33	1,158
Percentage of total	20.4%	36.5%	24.2%	17.3%	1.5%	100.0%	18.3%	<b>29.2</b> %	<b>24.9</b> %	<b>24.9</b> %	2.7%	100.0%	<b>18.7</b> %	24.8%	31.3%	23.0%	2.2%	100.0%	15.5%	24.3%	34.8%	22.6%	<b>2.9</b> %	100.0%

# Annex 2: GA uptake by local authority (apprentice and employer)

		201	17-18		2018-19				201	9-20	2020-21					
	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total
Aberdeen City	10	3.6%	20	7.2%	47	5.1%	71	7.8%	56	4.8%	90	7.8%	47	4.1%	83	7.2%
Aberdeenshire	13	4.7%	*	*	52	5.7%	26	2.8%	70	6.1%	39	3.4%	74	6.4%	46	4.0%
Angus	11	4.0%	*	*	31	3.4%	17	1.8%	27	2.3%	18	1.6%	36	3.1%	18	1.6%
Argyll & Bute	*	*	*	*	*	*	*	*	10	0.9%	13	1.1%	8	0.7%	6	0.5%
Clackmannanshire	*	*	-	-	*	*	*	*	*	*	*	*	10	0.9%	*	*
Comhairle nan Eilean Siar	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dumfries & Galloway	*	*	*	*	8	0.9%	7	0.8%	23	2.0%	21	1.8%	20	1.7%	12	1.0%
Dundee City	9	3.2%	17	6.2%	27	2.9%	32	3.5%	20	1.7%	33	2.9%	23	2.0%	34	3.0%
East Ayrshire	5	1.8%	*	*	22	2.4%	9	1.0%	31	2.7%	11	1.0%	20	1.7%	5	0.4%
East Dunbartonshire	6	2.2%	*	*	25	2.7%	*	*	30	2.6%	*	*	26	2.3%	*	*
East Lothian	6	2.2%	*	*	15	1.6%	*	*	10	0.9%	6	0.5%	18	1.6%	8	0.7%
East Renfrewshire	*	*	-	-	15	1.6%	*	*	18	1.6%	*	*	21	1.8%	6	0.5%
Edinburgh, City of	23	8.3%	37	13.4%	93	10.1%	182	19.8%	98	8.5%	192	16.6%	88	7.6%	178	15.4%
Falkirk	9	3.2%	6	2.2%	32	3.5%	12	1.3%	37	3.2%	12	1.0%	30	2.6%	18	1.6%
Fife	9	3.2%	7	2.5%	72	7.9%	52	5.7%	83	7.2%	51	4.4%	78	6.7%	53	4.6%
Glasgow City	28	10.1%	91	33.0%	72	7.9%	169	18.4%	112	9.7%	264	22.8%	121	10.5%	280	24.2%
Highland	12	4.3%	11	4.0%	23	2.5%	17	1.8%	40	3.5%	39	3.4%	41	3.5%	41	3.6%
Inverclyde	*	*	*	*	10	1.1%	9	1.0%	26	2.3%	17	1.5%	23	2.0%	7	0.6%
Midlothian	*	*	-	-	14	1.5%	10	1.1%	22	1.9%	13	1.1%	17	1.5%	10	0.9%
Moray	6	2.2%	6	2.2%	17	1.8%	16	1.7%	13	1.1%	11	1.0%	10	0.9%	12	1.0%
North Ayrshire	13	4.7%	4	1.4%	34	3.7%	28	3.0%	29	2.5%	16	1.4%	21	1.8%	10	0.9%
North Lanarkshire	20	7.2%	10	3.6%	81	8.8%	85	9.2%	83	7.2%	77	6.7%	82	7.1%	66	5.7%
Orkney Islands	-	-	-	-	11	1.2%	11	1.2%	10	0.1%	9	0.8%	12	1.0%	12	1.0%
Outwith Area	-	-	-	-	*	*	*	*	-	-	11	1.0%	*	*	5	0.4%
Perth & Kinross	*	0.7%	*	*	14	1.5%	10	1.1%	34	2.9%	27	2.3%	26	2.3%	32	2.8%
Renfrewshire	18	6.5%	6	2.2%	31	3.4%	25	2.7%	72	6.2%	49	4.2%	62	5.4%	50	4.3%

Continued on next page

# Annex 2: GA uptake by local authority (continued)

		201	7-18			2018-19				201	9-20		2020-21					
	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total	No. of registered GAs by home LA	% total	No. of registered GAs by employer LA	% total		
Scottish Borders	*	*	*	*	10	1.1%	9	1.0%	28	2.4%	24	2.1%	21	1.8%	16	1.4%		
Shetland Islands	*	*	*	*	*	*	*	*	6	0.5%	7	0.6%	8	0.7%	7	0.6%		
South Ayrshire	9	3.2%	8	2.9%	20	2.2%	17	1.8%	17	1.5%	15	1.3%	31	2.7%	15	1.3%		
South Lanarkshire	20	7.2%	9	3.3%	65	7.1%	37	4.0%	63	5.5%	33	2.9%	98	8.5%	69	6.0%		
Stirling	5	1.8%	*	*	11	1.2%	13	1.4%	14	1.2%	15	1.3%	18	1.6%	16	1.4%		
West Dunbartonshire	10	3.6%	*	*	14	1.5%	6	0.7%	20	1.7%	12	1.0%	21	1.8%	6	0.5%		
West Lothian	13	4.7%	7	2.5%	40	4.3%	30	3.3%	50	4.3%	25	2.2%	42	3.6%	32	2.8%		
Unknown	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total	277	100.0%	277	100.0%	920	100.0%	920	100.0%	1,157	100.0%	1,157	100.0%	1,158	100.0%	1,158	100.0%		

# Annex 3: Framework delivery by learning provider

2017-18	CE L10	CE L8	CS L10	EDM	ITMB	ITSD	Total
Edinburgh Napier University	-	-	6	-	9	11	26
Glasgow Caledonian University	-	-	-	15	16	51	82
Glasgow Kelvin College	-	17	-	-	-	-	17
Heriot-Watt University	-	-	-	8	8	*	23
Robert Gordon University	-	-	-		19	10	29
University of Dundee	12	-	-	*	13	*	30
University of Strathclyde	-	-	-	31	-	-	31
University of the Highlands and Islands	-	18	-	-	-	-	18
University of The West of Scotland	-			*		14	21
Grand Total	12	35	6	64	65	95	277

2018-19	BM	BMFS	CE L10	CE L8	CBE	CS L10	CS L11	DS	EDM	EIMC	ITMB	ITSD	Total
Edinburgh Napier University	16	-	23	-	18	15	-	-	-	-	46	19	107
Glasgow Caledonian University	39	-	16	-	16	32	12	-	12	-	-	33	160
Glasgow Kelvin College	-	-	-	12	-	-	-	-	-	-	-	-	12
Heriot-Watt University	57	9	16	-	16	-	-	-	29	-	-	18	158
Queen Margaret University	15	-	-	-	-	-	-	-	-	-	-	-	15
Robert Gordon University	55	11	-	-	14	-	-	-	22	24	-	*	144
The Open University	-	-	-	-	-	7	13	-	-	-	-	*	24
University of Dundee	23	-	15	-	-	-	-	-	11	-	-	*	56
University of Edinburgh	-	-	-	-	-	-	-	11	-	-	-	-	11
University of St Andrews	-	-	-	-	-	-	-	6	-	-	-	-	6
University of Strathclyde	51	-	-	-	-	-	-	-	39	-	-	35	125
University of the Highlands and Islands	-	-	13	12	-	-	-	-	-	-	-	-	25
University of The West of Scotland	37	-	18	-	-	-	-	-	10	-	-	12	77
Grand Total	293	20	101	24	64	54	25	17	123	24	46	129	920

2019-20	AC	ELC	BM	CE L10	CE L8	CBE	CS L10	CS L11	DS	EDM	EIMC	ІТМВ	ITSD	Total
Edinburgh Napier University	-	-	23	14	-	46	24	-	11	8	-	*	22	160
Glasgow Caledonian University	-	-	58	23	-	34	8	18	-	22	-	-	35	198
Glasgow Kelvin College	-	-	-	-	*	-	-	-	-	-	-	-	-	*
Heriot-Watt University	-	-	65	18	-	21	-	-	9	22	7	22	10	174
Queen Margaret University	-	-	13	-	-	-	-	-	-	-	-	-	-	13
Robert Gordon University	38		47			20			15	18	29	15		181
The Open University	-	-	-	-	-	-	18	10	-	-	-	-	8	36
University of Aberdeen	-	-	-	*	-	-	-	-	-	-	-	-	-	5
University of Dundee	-	-	25	14	-	-	-	-	-	7	-	*	8	58
University of Edinburgh	-	-	-	-	-	-	-	2	6	-	-	-	-	8
University of Glasgow	-	-	-	-	-	-	-	-	-	-	-	-	34	34
University of St Andrews	-	-	-	-	-	-	-	-	5	-	-	-	-	5
University of Strathclyde	-	-	41	19	-	-	-	23	-	37	-	-	31	151
University of the Highlands and Islands	-	15	-	*	*	-	-	-	-	-	-	-	-	22
University of The West of Scotland	-	15	-	27	-	-	-	-	-	15	-	-	8	103
Grand Total	38	30	310	124	12	121	50	53	46	129	36	53	156	1,157

2020-21	AC	ELC	BM	CE L10	CE L8	CBE	CS L10	CS L11	DS	EDM	EIMC	ІТМВ	ITSD	Total
Edinburgh Napier University	-	-	26	9	-	36	19	-	7	-	-	7	16	120
Glasgow Caledonian University	-	-	67	18	-	33	*	16	-	49	-	-	26	226
Heriot-Watt University	-	-	47	*	-	15	-	-	13	33	*	12	*	143
Queen Margaret University	-	-	15	-	-	-	-	-	-	-	-	-	-	15
Robert Gordon University	43	-	85	-		12	-	-	22	*	*	11	-	204
The Open University	-	-	-	-	-	-	*	9	-	-	-	-	*	17
University of Dundee	-	-	27	10	-	-	-	-	-	10	-	7	6	60
University of Edinburgh	-	-	-	-	-	-	-	-	6	-	-	-	-	6
University of Glasgow	-	-	-	-	-	-	-	-	-	-	-	-	49	49
University of Stirling	-	-	-	-	-	-	-	-	19	-	-	-	-	19
University of Strathclyde	-	-	85	22	-	-	-	17	-	47	-	-	14	185
University of the Highlands and Islands	-	8	-	*	*	-	-	-	-	-	-	-	-	21
University of The West of Scotland	-	31	39	15	-	-	-	-	-	*	-	-	*	93
Grand Total	43	39	388	95	*	95	41	42	64	162	17	36	125	1,158

Key:

Accounting	AC	Cyber Security Level 11	CS L11
Early Years and Childcare	ELC	Data Science	DS
Business Management	BM	Engineering: Design and Manufacture	EDM
Civil Engineering Level 10	CE L10	Engineering : Instrumentation, Measurement and Control	EIMC
Civil Engineering Level 8	CE L8	IT:Management for Business	ITMB
Construction and the Build Environment	CBE	IT: Software Development	ITSD
Cyber Security Level 10	CS L10		

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