

Skills  
Development  
Scotland

# Graduate Apprenticeships

Early Activity and Progress

2019/20



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# Foreword

As Chair of Skills Development Scotland (SDS), and as a Scottish employer, I am very pleased to present the second annual progress report for Graduate Apprenticeships (GAs). Following their launch in 2017, we have now seen three academic years of intake, giving more than 2,000 people access to industry relevant degree courses.

Graduate Apprenticeships offer a unique learning opportunity, providing a blend of academic and work-based learning for employees, enabling them to up-skill or re-skill while in paid employment. They provide a new route for people to gain degree-level, industry recognised qualifications where their academic learning is contextualised in their workplace.

Employer demand for Graduate Apprenticeships is illustrated by the continued growth in uptake, from 278 apprentices in the first year of delivery to over 1,100 last year. We have also witnessed an increasing level of interest from learning providers with more Higher Education institutions now offering Graduate Apprenticeships as part of their curriculum.

The Coronavirus pandemic has caused new levels of economic uncertainty. It has also fundamentally changed the context in which Graduate Apprenticeships are delivered.

One of the most striking changes may be the normalisation of digital learning. One of the strengths of Graduate Apprenticeships is the flexibility that exists within the delivery model. This has enabled universities to deploy their experience of online learning to adapt and continue Graduate Apprenticeship provision throughout the pandemic.

As we emerge from this crisis, the strength and resilience of Graduate Apprenticeships will play a key part in Scotland's economic recovery. This was reinforced by the Enterprise and Skills Strategic Board and the Advisory Group for Economic Recovery in their recommendation for sustained investment in apprenticeships. The importance of a strong work-based learning system in support of economic recovery from COVID-19 was also underlined by a recent OECD report<sup>1</sup> which recommended how Scotland could continue to build apprenticeship capacity to respond to change, especially in the face of challenges brought by the pandemic.

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

They are co-designed with employers to offer bespoke learning, fresh thinking and develop the meta-skills in individuals that enable them to better cope in a fast-changing world of work.

The Scottish Government has committed to embedding Graduate Apprenticeships as part of the wider college and university provision. SDS is working closely with the Scottish Funding Council (SFC), and in partnership with colleges and universities, to develop a plan for delivery for 2021 and beyond.

Now, more than ever perhaps, there is an increasing need to ensure Scotland's people are equipped with the critical skills and experience to support key occupational growth areas. Graduate Apprenticeships are up-skilling workers in these 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

<sup>1</sup> OECD (2020), Strengthening Skills in Scotland: OECD Review of the Apprenticeship System in Scotland, OECD Publishing, Paris

# Introduction

## Background

Skills are an integral part of productivity. 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 Scottish Government has made a firm commitment to increase productivity, inclusive growth and fair work, with an ambition to rank in the top quartile for productivity against our key trading partners in the Organisation for Economic Cooperation and Development (OECD). SDS has a role in helping to ensure that the demand for skills from businesses and wider industry is met by a suitably skilled, work-ready labour market. The development of work-based learning pathways aims to narrow the gap between qualification levels and skills, in line with the Scottish Government's productivity ambition.

## Graduate and Higher Apprenticeships

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

Graduate Apprenticeships are offered in key sectors where there is a real need for skilled employees. The award is delivered through partnerships between employers and universities, where the apprentice is in employment for the duration of their studies. 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.

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

Creating new pathways in key occupational growth areas not only provides access to opportunities with degree qualifications, but also addresses current skills shortages.

Figure 1: Key features of a Graduate Apprenticeship



## Development and Launch 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.

## Type of 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 2. Accounting and Early Learning and Childcare are new frameworks for 2019/20, broadening the range of frameworks available. Further developments in Graduate Apprenticeships will be led by SAAB in response to demand from industry in critical occupation areas.

Business Management: Financial Services was introduced in 2018/19 but has now been amalgamated with the Business Management framework as they are very closely aligned.

Framework	SCQF Level	Year Launched
 Accounting	SCQF Level 11	2019/20
 Business Management	SCQF Level 10	2018/19
 Business Management: Financial Services	SCQF Level 10	2018/19
 Civil Engineering	SCQF Level 8	2017/18
 Civil Engineering	SCQF Level 10	2017/18
 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
 Engineering: Design and Manufacture	SCQF Level 10	2017/18
 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

## 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 2019, 2 years on from inception, Graduate Apprenticeships are more widely known amongst employers and recognised across Higher Education. This has resulted in a third year of delivery that saw 1,160 registered apprentices working for 506 employers with 15 institutions offering up to 13<sup>2</sup> different GA frameworks.

<sup>2</sup> Note 13 frameworks, rather than 14, as Business Management: Financial Services has been amalgamated with Business Management



## Learner experience: Civil Engineering

22-year-old Bethany Welsh completed a Modern Apprenticeship through Inverness College UHI and infrastructure giants, Balfour Beatty. She's now employed by the business as a Graduate Apprentice. Bethany's success resulted in her being named a finalist in the Graduate Apprentice Rising Star category at the Scottish Apprenticeship Awards in 2019.

She said: "Having a chance to do an apprenticeship and actually work on a site was something that really appealed to me."

"The Graduate Apprenticeship has allowed me to earn while I learn and get the same qualification as someone who goes to university – however I've got a few extra years of experience, which is what employers are looking for."

Bethany is also an enthusiastic female ambassador for engineering as a career for everyone, especially after her positive experience with Balfour Beatty during the Modern and Graduate Apprenticeship.

She said: "Engineering isn't this dirty industry that it's sometimes portrayed as – I wouldn't say being a female has affected my opportunities in any way."

"Balfour Beatty has really given me the scope to evolve as a person. Everyone on site has been really welcoming to me and I've always been made to feel like one of the team."

"Getting the opportunity to work on a project from start to finish is amazing – it's so rewarding to get to drive over bridges that I've actually helped create."



Bethany Welsh, Graduate Apprentice

# Balfour Beatty

## Context for Readers

This is the second Graduate Apprenticeship progress report. As it is only the third year of post-pilot delivery, data is provided to describe its evolution, to date, and the progress made.

In this report we provide detail for three groups of Graduate Apprentices. Each group of apprentices is categorised according to the academic year they started their GA: 2017/18, 2018/19 or 2019/20.

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.


Previously, GA data was recorded elsewhere. Therefore, figures reported here may differ from those previously reported due to quality assurance. Data in this report is from a FIPS extract taken on the 1st April 2020.

## 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. This was known as 'starts' in the previous progress report.
- **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).
- **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.

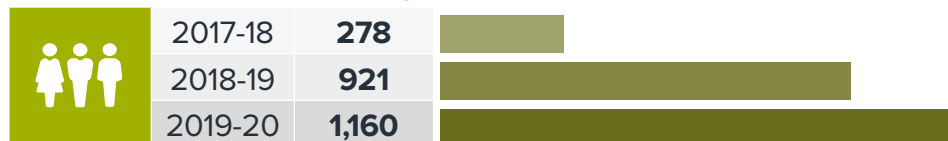
Any comments or suggestions regarding the content of this report are welcome and can be emailed to: [user\\_feedback@sds.co.uk](mailto:user_feedback@sds.co.uk).



# Key results

 **2,359** individuals taking up a Graduate Apprenticeship in the first 3 years of delivery

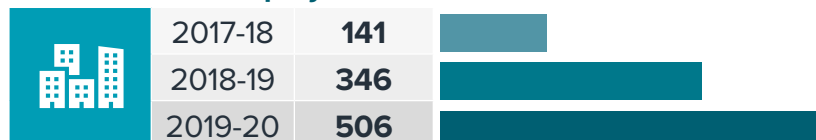
## Number of individuals taking up a Graduate Apprenticeship



## Number of learning providers delivering Graduate Apprenticeships



## Number of GA employers



## Number of GA frameworks



## % of GA employers who took on a Graduate Apprentice that also took on at least one Graduate Apprentice the following year

2017-18 to 2018-19	<b>46.8%</b>	<b>66 of 141</b>
2018-19 to 2019-20	<b>38.7%</b>	<b>134 of 346</b>

## Learner survey (2019)



- **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

Top 2 factors that encouraged learners to consider applying for GA were:



- Opportunity to develop skills that will allow me to progress in my career
- Earning while gaining a degree level qualification

## Employer Survey (2019)

- **100%** of employers would consider taking on another GA in the future

Main benefits cited by employers:



- Workforce sustainability
- Skills development – filling skills gaps
- Retention and loyalty
- New thinking and ideas



## Learner experience: IT Software Development

Connor Hay was a finalist in the Graduate Apprentice Rising Star category of the Scottish Apprenticeship Awards in 2019.

Having joined technology company Leidos as a Modern Apprentice in 2016, he excelled in his role and became a Graduate Apprentice – spending one day a week at the University of the West of Scotland.

Connor could have gone to university with his Highers but opted for a different route.

Connor said: “I hadn’t really considered an apprenticeship, it was only when I came to Leidos on work experience I realised this was what I wanted to do, and this was where I wanted to do it.

“My brother, Paul, also works at Leidos and went to university, but it took him four years to get into the same job I’m in. Choosing an apprenticeship also meant I avoided student debt. This just shows that apprenticeships are a great way into the industry.”

Connor is now set to become the youngest ever senior developer at Leidos – which his manager believes is testament to apprenticeships.



Connor Hay, Graduate Apprentice



# High Performing People

Graduate Apprenticeships are designed to create opportunities for people to develop skills that are sought by employers. They provide employees with a blend of academic study, delivered through universities, and contextualised work-based learning with their employer.

## Uptake of GA opportunities

This section of the report provides details about the learners that have registered for a Graduate Apprenticeship, in each year of intake, to date. Graduate Apprenticeships have been well received by industry, and by employers and their employees, with the growth in registered apprentices reflecting this. At the start of the 2019/20 academic year, there were 1,160 individuals registered to commence a Graduate Apprenticeship, more than 4 times greater than the number of GAs in 2017/18.

## Entry Point

A Graduate Apprenticeship at SCQF level 10 (Honours degree level) can take up to four years to complete, and a Higher Apprenticeship at SCQF level 8 (Diploma of Higher Education) can take up to 2 years to complete. Some individuals may complete the GA in less time, as recognition of prior learning (RPL) is offered to those with relevant existing qualifications and experience – eradicating duplication of study.

Although most GAs began their study in year 1, some were able to enter at later points, due to RPL. Table 1 provides a summary of entry points for apprentices in each year of intake.

Table 1: GA uptake by degree course year of entry

Degree course year of entry	2017-18		2018-19		2019-20	
	No.	% of total	No.	% of total	No.	% of total
Year 1	231	83.1%	826	89.7%	977	84.2%
Year 2	*	*	47	5.1%	144	12.4%
Year 3	22	7.9%	48	5.2%	*	*
Year 4	*	*	-	-	*	*
<b>Total</b>	<b>278</b>	<b>100.0%</b>	<b>921</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

Individuals benefiting from being able to bypass a portion of their degree course due to recognition of their prior formal learning, or work experience, has varied over the first three years of the programme. Figure 2 shows the trend, to date, illustrating a dip in RPL in 2018/19. We will continue to track this each year and note the correlation between this and other variables, particularly the age profile of apprentices.

Figure 2: RPL 3-year trend



## GA Frameworks

The degree subject areas that are available to study are classified under separate frameworks, in line with other apprenticeships. Frameworks have been developed in consultation with industry and in response to perceived current and future skills needs within Scotland's economy. Over the three years, to date, the number of available frameworks has grown from 6 in 2017/18 to 13 in 2019/20. In 2018/19 there were 12 frameworks, two of these have now been amalgamated as previously stated. Table 2 shows the number of GA opportunities realised for each framework across all three academic years.

Table 2: GA uptake by framework

Framework	2017-18		2018-19		2019-20	
	No.	% total	No.	% total	No.	% total
Accounting	N/a	N/a	N/a	N/a	38	3.3%
Business Management	N/a	N/a	294	31.9%	310	26.7%
Business Management: Financial Services	N/a	N/a	20	2.2%	-	-
Civil Engineering L10	12	4.3%	101	11.0%	124	10.7%
Civil Engineering L8 <sup>3</sup>	35	12.6%	24	2.6%	12	1.0%
Construction and the Built Environment	N/a	N/a	64	6.9%	121	10.4%
Cyber Security L10	6	2.2%	54	5.9%	52	4.5%
Cyber Security L11	N/a	N/a	25	2.7%	53	4.6%
Data Science	N/a	N/a	17	1.8%	46	4.0%
Early Learning and Childcare	N/a	N/a	N/a	N/a	30	2.6%
Engineering: Design and Manufacture	65	23.4%	123	13.4%	131	11.3%
Engineering: Instrumentation, Measurement and Control	N/a	N/a	24	2.6%	36	3.0%
IT: Management for Business	65	23.4%	46	5.0%	52	4.5%
IT: Software Development	95	34.2%	129	14.0%	155	13.4%
<b>Total</b>	<b>278</b>	<b>100.0%</b>	<b>921</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

<sup>3</sup> Note that the Level 8 is a 2 year Higher Apprenticeship, rather than 4 year Graduate Apprenticeship

## GA uptake by Age

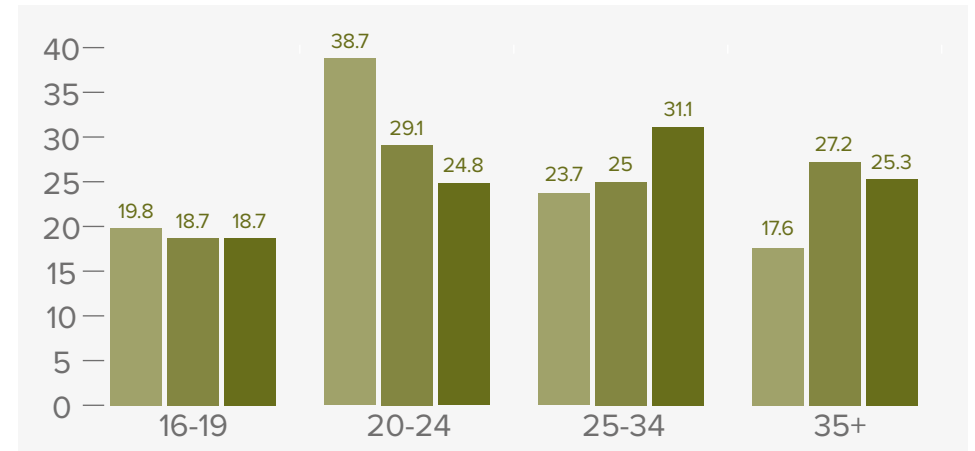
In 2019/20 the dominant age band is 25-34 year olds. This differs from the national profile of undergraduate students across other types of degree programme. Table 3 shows the split by age band across each GA cohort to date.

Table 3: GA uptake by age band

	2017-18	2018-19	2019-20
Age band	No. registered	No. registered	No. registered
16-19	55	172	217
20-24	108	268	288
25-34	66	230	361
35-49	*	226	268
50+	*	25	26
<b>Total</b>	<b>278</b>	<b>921</b>	<b>1,160</b>

Figure 3 shows each GA cohort as a proportion of total opportunities realised each year. In 2019/20 there has been a shift in the proportion of registered GAs in the 20-24 and 25-34 age bands, with more than half of GAs in 2019/20 being aged 25 or above on commencing study. This suggests that work-based learning is growing in popularity with older, more experienced employees, as a means for up-skilling later in their career. Those aged over 35 continue to make up over a quarter of all GAs.

Figure 3: GA uptake – % age band 3-year trend



Annex 1 provides detail of which frameworks are being taken up by each of the age bands across the three years. In line with 2018/19, for 2019/20 those aged 25 and over were predominantly registered on the Business Management framework.

The top 5 frameworks within the 16-24 age band remain unchanged across the three years and are:

-  **IT: Software Development**
-  **Civil Engineering**
-  **Business Management**
-  **Construction and the Built Environment**
-  **Engineering: Design and Manufacture**

## GA uptake by Gender

Having seen an improvement last year in gender balance, 2019/20 saw a slight reduction, with the proportion of females falling 2.6 percentage points to 32.3%. This remains a significant improvement on 2017/18.

Table 4: GA uptake by gender<sup>4</sup>

	2017-18		2018-19		2019-20	
	No.	% total known	No.	% total known	No.	% total known
Male	226	81.9%	600	65.1%	784	67.7%
Female	50	18.1%	321	34.9%	374	32.3%
Prefer not to say	2	-	-	-	2	-
<b>Total</b>	<b>278</b>	<b>100.0%</b>	<b>921</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

In line with our Apprenticeship Equality Action Plan, which applies to all our apprenticeship programmes, we actively work to improve gender balance across apprenticeships. In addition to further support this work, last year the Scottish Apprenticeship Advisory Board set up a commission to address gender imbalance across apprenticeships. Graduate Apprenticeships are, however, demand-led.

<sup>4</sup> Since publication of our first progress report, universities have begun recording participant details through our online FIPS system, in line with our other apprenticeship programmes. This has improved our data quality but means that data here may vary slightly from that reported last year.



**Shannon McNamara** progressed from a Modern Apprenticeship into a Graduate Apprenticeship

Table 5: GA uptake by known gender and framework<sup>5</sup>

Framework	2017-18		2018-19		2019-20	
	Male	Female	Male	Female	Male	Female
Accounting	N/a	N/a	N/a	N/a	14	24
Business Management	N/a	N/a	103	191	143	166
Business Management: Financial Services	N/a	N/a	9	11	-	-
Civil Engineering L8 & L10	39	8	104	21	119	17
Construction and the Built Environment	N/a	N/a	44	20	83	38
Cyber Security L10	*	*	44	10	47	5
Cyber Security L11	N/a	N/a	*	*	46	7
Data Science	N/a	N/a	*	*	26	20
Early Learning and Childcare	N/a	N/a	N/a	N/a	*	*
Engineering: Design and Manufacture	*	*	105	18	117	14
Engineering: Instrumentation, Measurement and Control	N/a	N/a	*	*	*	*
IT: Management for Business	52	11	35	11	36	16
IT: Software Development	72	23	102	27	118	36
<b>Total</b>	<b>226</b>	<b>50</b>	<b>600</b>	<b>321</b>	<b>784</b>	<b>374</b>

Business Management remains a popular framework for female apprentices, with Accounting (new for 2019/20) and Data Science (introduced last year) also attracting higher proportions of females. In addition, compared to the wider construction sector, the % of female GAs in the Construction and the Built Environment framework is almost three times higher than the construction industry as a whole, (around 11%<sup>6</sup>).

<sup>5</sup> Uptake by framework data may vary slightly from the previous progress report as there has been a small number of learners who have switched framework.

<sup>6</sup> <https://www.skillsdevelopmentscotland.co.uk/media/46047/ssa-construction.pdf>

Figure 4: GA uptake by framework and known gender 3-year trend

Framework	2017-18		2018-19		2019-20	
	Male	Female	Male	Female	Male	Female
Accounting	N/a	N/a	N/a	N/a	36.8%	63.2%
Business Management	N/a	N/a	35.0%	65.0%	46.3%	53.7%
Business Management: Financial Services	N/a	N/a	45.0%	55.0%	-	-
Civil Engineering L8 & L10	83.0%	17.0%	83.2%	16.8%	87.5%	12.5%
Construction and the Built Environment	N/a	N/a	68.8%	31.3%	68.6%	31.4%
Cyber Security L10	*	*	81.5%	18.5%	90.4%	9.6%
Cyber Security L11	N/a	N/a	*	*	86.8%	13.2%
Data Science	N/a	N/a	*	*	56.5%	43.5%
Early Learning and Childcare	N/a	N/a	N/a	N/a	*	*
Engineering: Design and Manufacture	*	*	85.4%	14.6%	89.3%	10.7%
Engineering: Instrumentation, Measurement and Control	N/a	N/a	*	*	*	*
IT: Management for Business	82.5%	17.5%	76.1%	23.9%	69.2%	30.8%
IT: Software Development	75.8%	24.2%	79.1%	20.9%	76.6%	23.4%

Figure 4 shows the balance in gender as a proportion of cohort size for each year. Data Science and IT: Management for Business frameworks have both seen a rise in the proportion of female apprentices. Cyber Security and Engineering frameworks have experienced the opposite. Relative to 2017/18, the gender balance is significantly improved and for such a young programme, we expect to see fluctuations before the balance rests at a mature equilibrium.



## STEM Frameworks

Due to the policy interest in STEM apprenticeships we include data on those frameworks classified as science, technology, engineering or maths related. Based on the current STEM definition, agreed every year in partnership with Scottish Government, 10 of the 13 GA frameworks could be classed as STEM. Those not fulfilling current STEM criteria are:




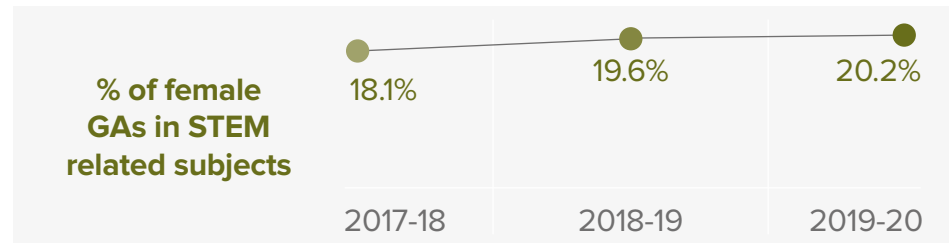



-  **Accounting**
-  **Early Learning and Childcare**
-  **Business Management**

Figure 5: Proportion of females undertaking a STEM related GA



The proportion of females in a STEM related subject has improved since 2017-18. STEM related frameworks with the highest levels of female participation were:

-  **Data Science (43.5%)**
-  **Construction and the Built Environment (31.4%)**
-  **IT: Management for Business (30.8%)**

## Equality

The Apprenticeship Equality Action Plan<sup>7</sup> describes the active steps we are taking, in conjunction with partners, to ensure there is equality of access across Scottish Apprenticeships (Foundation, Modern, Higher and Graduate Apprenticeships). Information 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.

## Disability

The proportion of GAs self-declaring an impairment, health condition or learning ability is show below.

Table 6: GA uptake by self-identified disability status

	2017-18		2018-19		2019-20	
	No.	% total known	No.	% total known	No.	% total known
Disabled	19	7.7%	69	7.8%	113	9.9%
Not disabled	227	92.3%	819	92.2%	1,029	90.1%
Prefer not to say	14	-	21	-	18	-
<b>Total</b>	<b>260</b>	<b>100.0%</b>	<b>909</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

The proportion of apprentices self-declaring a disability has increased year on year.

## Ethnicity

Table 7: GA uptake by self-identified ethnicity

	2017-18		2018-19		2019-20	
	No.	% total known	No.	% total known	No.	% total known
Non-White <sup>8</sup>	10	4.0%	31	3.5%	50	4.3%
White	243	96.0%	858	96.5%	1,101	95.7%
Prefer not to say	7	-	20	-	9	-
<b>Total</b>	<b>260</b>	<b>100.0%</b>	<b>909</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

For the first 2 years of Graduate Apprenticeships, the balance of ethnicity remained static. However, this has improved in 2019/20, with a greater proportion (4.3%) of GA opportunities realised from a BAME group. In 2019/20 IT: Management for Business has the greatest proportion of GAs from a BAME group (11.5%). Of the 13 frameworks available for 2019/20 uptake, 3 frameworks have no representation from a BAME group, these are:



**Early Learning and Childcare**



**Civil Engineering (Level 8)**



**Engineering: Instrumentation, Measurement and Control**

## Care Experience

Table 8: GA uptake by self-identified care experience

Care experience	2017-18		2018-19		2019-20	
	No.	% total known	No.	% total known	No.	% total known
Yes	-	-	*	*	5	0.4%
No	248	100.0%	843	*	1,136	99.6%
Prefer not to say	12	-	*	*	19	-
<b>Total</b>	<b>260</b>	<b>100.0%</b>	<b>909</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

## 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.

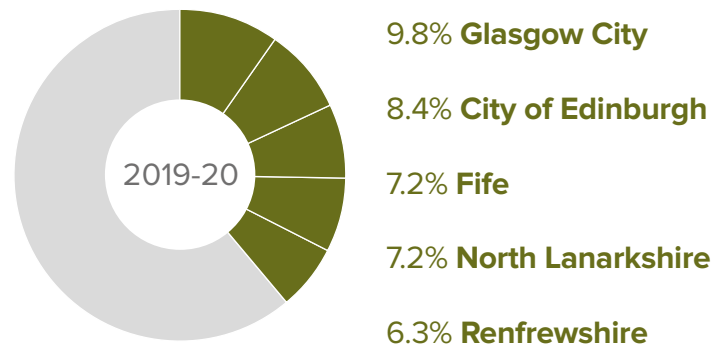
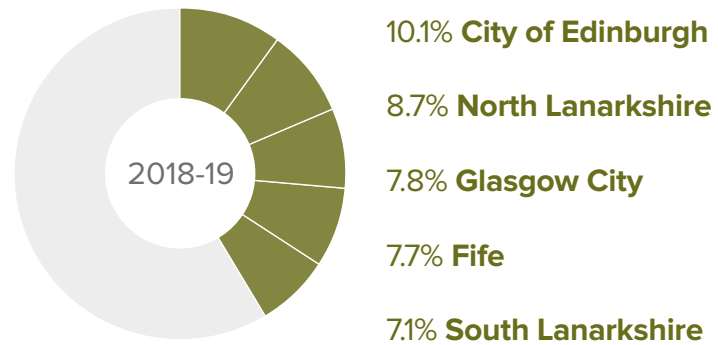
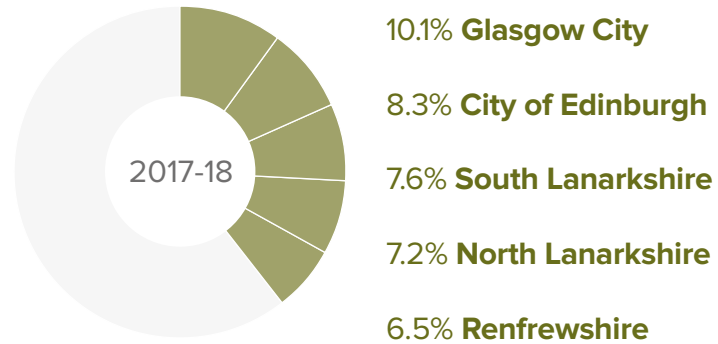
The tables in Annex 2 show the number of GA opportunities realised for the past three years, based on the home address of the apprentice and the office address of their employer.

It is important to note that individuals may travel from their home to another local authority to work with their employer. For example, in 2019/20, 9.8% of GAs lived in Glasgow but 22.4% of GAs worked with an employer based there.

As with last year, all local authorities have at least one employer with at least one Graduate Apprenticeship position. Only 4 local authorities had less than 5 GAs in total across their participating employers, a reduction from 7 local authorities the previous year.

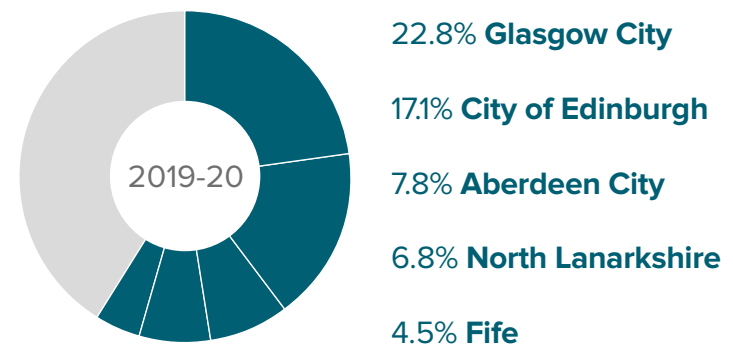
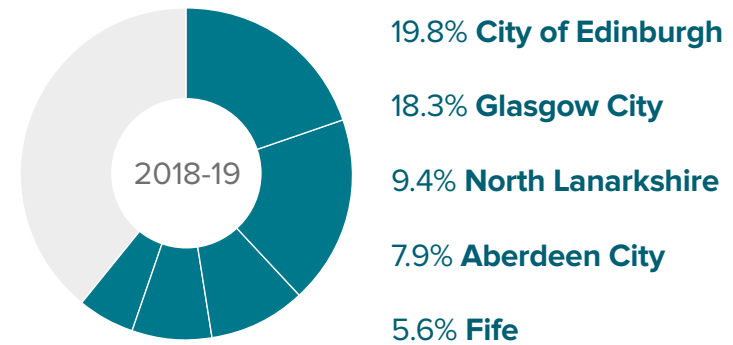
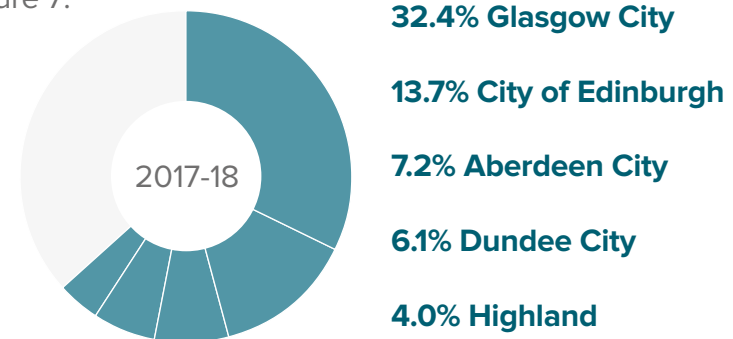
Across each year of intake, the highest % of GAs lived in:

Figure 6:



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

Figure 7:



## Scottish Index of Multiple Deprivation

The Scottish Index of Multiple Deprivation<sup>9</sup> (SIMD, 2020) is a tool used to identify geographical areas that may need more help or resources. It was updated this year and replaces the previous SIMD that was based on 2016 area data. This means that we cannot make direct comparisons with GA data from previous years, as we would not be comparing like with like.

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 identifies deprived areas, not individuals. Not all of those who live in a deprived area will be deprived and on balance there could be deprived people living in the least deprived areas. Additionally, 'deprived' does not just mean 'poor' or 'low income' – it can also mean that people have fewer resources and opportunities, in health and education, for example<sup>10</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 '10% most deprived areas' and 10 is within '10% least deprived areas'.

Table 9 shows the number and percentage of Graduate Apprentices living in each SIMD area, ranked from most (1) to least (10) deprived.

Table 9: GA uptake by SIMD area for cohort 3 (2019/20)

SIMD (2020) area	No. of GAs 2019-20	% of total
1	78	6.7%
2	69	5.9%
3	86	7.4%
4	122	10.5%
5	102	8.8%
6	111	9.6%
7	155	13.4%
8	157	13.5%
9	160	13.8%
10	120	10.3%
<b>Total</b>	<b>1,160</b>	<b>100.0%</b>

Graduate Apprenticeships continue to be taken up, predominantly, by those who live in the least deprived areas. Although not directly comparable, the proportion of GAs from the three most deprived areas (1, 2 and 3) has been fairly static in each year of intake, continuing to make up around 20% of all opportunities realised.

<sup>9</sup> <https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/>

<sup>10</sup> <https://www.gov.scot/publications/scottish-indexmultiple-deprivation-2020/pages/4/>

## GAs currently in training

As most degrees are completed over a 4-year period, we would expect most GAs to still be in training. However, the Higher Apprenticeship (Civil Engineering at SCQF level 8) takes only 2 years to complete, so those who started studying for that qualification in 2017/18 should now have finished their study. There are also instances where recognition of prior learning has meant that some GAs entered study at 3rd or 4th year and so we would expect them to have completed, also.

For a variety of reasons, apprentices may leave their study early. Table 10 shows the status of all individuals that have been registered as a GA, noting whether they are still in training, have achieved their qualification, or have left their study early.

Table 10: Status of all GAs as at 1st April 2020

	2017-18		2018-19		2019-20	
	No.	% of all GAs	No.	% of all GAs	No.	% of all GAs
Achievers <sup>11</sup>	36	12.9%	-	-	-	-
Early leavers	66	23.7%	162	17.6%	45	3.9%
Still in training	176	63.3%	758	82.3%	1115	96.1%
<b>Total GAs</b>	<b>278</b>	<b>100.0%</b>	<b>921</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

<sup>11</sup> Final milestone payment has been made through FIPS and/or university has confirmed achievement

## Early leavers

A Graduate Apprentice is categorised as an early leaver if they leave their course prior to their expected end date, without achieving their intended qualification in full. Table 11 quantifies the number and proportion of early leavers for each cohort. Unsurprisingly, proportions are higher for the first cohort as it has been active longer than subsequent cohorts.

Table 11: Early leavers

	Early Leavers	No of registered GAs	% of registered GAs
<b>2017-18</b>	66	278	23.7%
<b>2018-19</b>	162	921	17.6%
<b>2019-20</b>	45	1160	3.9%

Table 12: Early Leavers by Age

	2017-18		2018-19		2019-20	
	No	% total	No	% total	No	% total
16-19	*	*	10	6.2%	*	*
20-24	23	34.8%	44	27.2%	10	22.2%
25-34	20	30.3%	45	27.8%	13	28.9%
35-49	13	19.7%	56	34.6%	18	40.0%
50+	*	*	7	4.3%	*	*
<b>Total</b>	<b>66</b>	<b>100.0%</b>	<b>162</b>	<b>100.0%</b>	<b>45</b>	<b>100.0%</b>

For 2018/19 and 2019/20, the greatest proportion of early leavers are in the 35-49 age band. The pattern is similar if looking at early leavers as a proportion of registered GAs for each age group, with lower retention rates in those aged over 25.

Table 13: Early Leavers by Gender

	2017-18			2018-19			2019-20		
	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	52	78.8%	23.0%	106	65.4%	17.7%	39	86.7%	5.0%
Female	14	21.2%	28.0%	56	34.6%	17.4%	6	13.3%	1.6%
<b>Total</b>	<b>66</b>	<b>100.0%</b>	<b>-</b>	<b>162</b>	<b>100.0%</b>	<b>-</b>	<b>45</b>	<b>100.0%</b>	<b>-</b>

When looking at early leavers in isolation, most early leavers are male. However, relative to the total proportions of registered male and female GAs for each cohort, there is no dominant gender in early leaver data. Over time, this may change and we will continue to monitor retention rates as Graduate Apprenticeships mature.

Table 14: Early Leavers by framework, relative to GA uptake

	2017-18		2018-19		2019-20	
	No	% uptake	No	% uptake	No	% uptake
Accounting	N/a	N/a	N/a	N/a	-	-
Business Management	N/a	N/a	56	19.0%	11	3.5%
Business Management: Financial Services	N/a	N/a	6	30.0%	-	-
Civil Engineering Level 8 and Level 10 <sup>12</sup>	16	3.4%	22	1.8%	6	4.8%
Construction and the Built Environment	N/a	N/a	*	*	*	*
Cyber Security Level 11	N/a	N/a	*	*	*	*
Cyber Security Level 10	N/a	N/a	12	21.8%	7	13.5%
Data Science	N/a	N/a	-	-	*	*
Early Learning and Childcare	N/a	N/a	N/a	N/a	-	-
Engineering Design and Manufacture	14	21.5%	16	13.0%	*	*
Engineering: Instrumentation, Measurement and Control	N/a	N/a	6	25.0%	6	16.7%
IT Management for Business	15	22.4%	18	37.5%	*	*
IT: Software Development	21	22.8%	16	12.7%	*	*
<b>Total</b>	<b>66</b>	<b>-</b>	<b>162</b>	<b>-</b>	<b>45</b>	<b>-</b>

<sup>12</sup> Data for Civil Engineering frameworks have been amalgamated for disclosure control purposes.

Table 14 shows early leavers, relative to the number of registered GAs for each framework. The highest proportions of early leavers are from IT: Software Development framework.

Examination of early leaver data by disability showed no striking pattern and aligned with the proportion of registered GAs self-declaring a disability.

Analysis of early leaver data by ethnicity shows an improvement (i.e. a drop) in the proportion of BAME GAs leaving their studies early. The proportion of BAME early leavers in 2019/20 is now lower than the total proportion of BAME registered GAs.

### Reasons for leaving early

The most common reasons given for leaving a GA early are:

- Difficulties with workload
- No longer wishes to continue with programme

We will continue to monitor early leavers and retention rates as the GA matures, taking appropriate measures, where necessary.

### Achievers

Graduate Apprentices who complete the full qualification and finish by the expected end date are classed as achieving their full GA.

As at April 1st, a total of 36 individuals from a total of 278 had achieved their full qualification. All achievers are, as expected, from the first cohort of GAs (2017/18). Most learners from cohort 1 are due to complete their study in 2021. In next year's progress report, we expect to see a small number of achievers from cohorts 2 and 3 who started their studies in either the 3rd or 4th year of the university course.

Table 15: Achievers by framework (2017/18)

Framework	No. of Achievers
IT: Management for Business	*
Civil Engineering Level 8	16
IT: Software Development	17
Engineering: Design and Manufacture	*
<b>Total achievers</b>	<b>36</b>

Table 16: Achievers by learning provider (2017/18)

Learning Provider	No. of achievers
Glasgow Caledonian University	11
Glasgow Kelvin College	10
University of Dundee	*
University of Highlands and Islands	*
University of the West of Scotland	8
<b>Total achievers</b>	<b>36</b>

We recognise that, among the early leavers, there will be individuals who have left their study at a recognised exit point. This means that it is likely that, although they may not have achieved their full Graduate Apprenticeship, they are likely to have gained components of the degree and may have been awarded, for example a Higher National Diploma or an ordinary degree. Work is ongoing to enable us to identify learners where this is the case.



## Learner experience: Engineering: Design and Manufacture

More than 20 years after leaving school, David Mackenzie was named the Graduate Apprentice Rising Star at the Scottish Apprenticeship Awards in 2019.

“I’m a different person now to when I left school – I wasn’t ready for further education then. It wasn’t until later in life that I wanted to add technical understanding to the hands-on experience. Luckily, I found out about the Graduate Apprenticeship through a colleague and it just ticked all the boxes.

“I think the Graduate Apprenticeship has given me confidence in my own abilities and shown that I actually know more than what I had previously given myself credit for.”

The theoretical side of engineering proved challenging for David, who hired a tutor to help him pass his Maths entry exam for the apprenticeship, after failing at the first attempt.

David admits the whole experience has been challenging but one that will benefit him and his family long-term.

He said: “If I want to progress any further at work then I need to get a degree and the Graduate Apprenticeship is giving me the opportunity to move up the chain.

“There’s people from all walks of life on my university course. I’m almost 40 and having the opportunity to do this but I suppose the beauty of the Graduate Apprenticeship is that it’s open to everyone.”



**David Mackenzie**, Graduate Apprentice



GlaxoSmithKline





## Learner experience: Business Management

23-year-old Lovemore Damba began his career with Falkirk Council where he gained experience as a civil engineering technician while attending college one day a week.

After becoming professionally qualified, Lovemore then moved to Amey Highways where he now works on the company's South East Scottish Trunk Roads Unit maintenance contract with Transport Scotland.

Lovemore said:

"I am part of the scheme delivery team on the STRU Contract. It means I am in at the deep end, but it is really enjoyable. Amey offered me the opportunity to do a Graduate Apprenticeship in Business Management at Queen Margaret University (QMU) and it made sense for me to do that.

"A Graduate Apprenticeship gives you the opportunity to get a degree, there's no debt at the end of it and you are getting experience... The course has catered well for people who are in full-time work because a lot of it has been tailored to what we do in our jobs and that helps a lot.

"My employers have been extremely supportive. I'm always given time to prepare my university work. My mentor is always happy to help me with anything I need, and you feel they think there is no such thing as a stupid question.

"I would say to anyone thinking about a Graduate Apprenticeship to go for it 100 percent."



**Lovemore Damba**, Graduate Apprentice



# High Performing Businesses

Graduate Apprenticeships are developed for, and in partnership with, businesses.

Learning providers work with employers to create the right balance of conceptual understanding and practical experience to ensure that apprentices return great benefits in their workplace.

The aim of the Graduate Apprenticeship is to ensure that industry has a supply of highly skilled and qualified individuals, providing businesses with access to degree-level training for existing and new staff that is relevant and tailored to their needs.

This is achieved through degree programmes which equip individuals with the required subject specific knowledge, skills and competence for their chosen profession. The learning that an apprentice does in the workplace counts towards their degree studies and the academic learning undertaken is directly relevant to the job and industry the individual is working in. This means that what an apprentice learns is put into practice straight away.

Graduate Apprenticeships are proven to deliver tangible business benefits, including increased productivity, talent development and retention and improved service delivery. They have also been shown to facilitate greater levels of staff engagement in their own professional development by offering a university experience for those who, perhaps, may have previously found Higher Education inaccessible.

## Employment status of GAs

The employment status of apprentices helps us to understand how the GA is being used by employers. Across all 3 years, most apprentices were existing, rather than new members of staff. This tells us that businesses have been using GAs to up-skill and retrain existing staff, rather than attract new talent. In 2019/20, this position was made even more prominent, with 86.6% of registered GAs being existing employees – which chimes with the increasing proportion of GAs aged 25 and over.

Figure 8: Graduate Apprentices – employment status (where known)

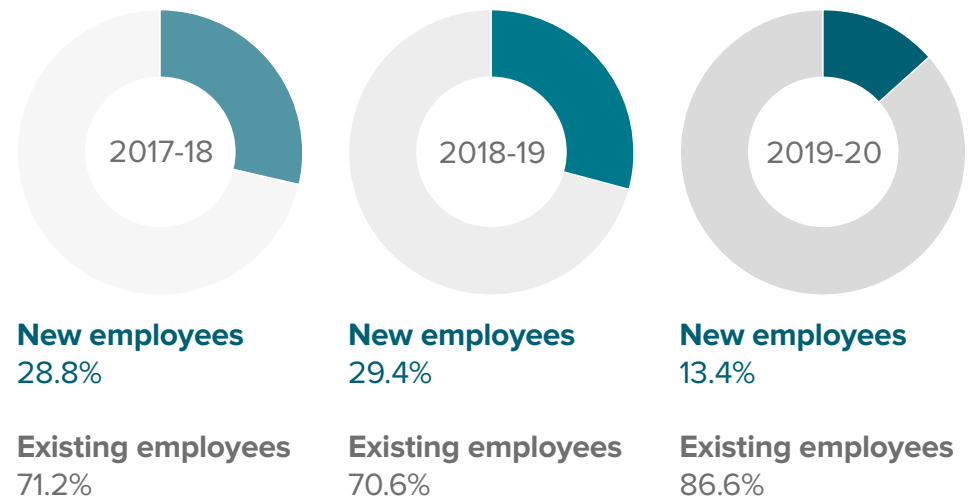


Table 17 shows the variation across different frameworks for each year of intake. In 2019/20 100% of GA opportunities realised in Cyber Security Level 11 were by existing employees, rather than new recruits. Early Learning and Childcare has attracted the highest proportion of new employees.

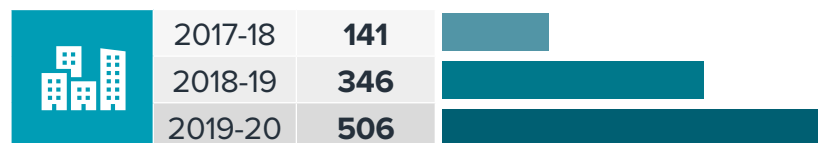
Table 17: % GA uptake by employment status [by framework]

	2017-18		2018-19		2019-20	
	CPD	New employment	CPD	New employment	CPD	New employment
Accounting	N/a	N/a	N/a	N/a	79.0%	21.0%
Business Management	N/a	N/a	89.8%	10.2%	95.1%	4.9%
Business Management: Financial Services	N/a	N/a	60.0%	40.0%	-	-
Civil Engineering L10	*	*	74.3%	25.7%	86.7%	13.3%
Civil Engineering L8	100.0%	-	100.0%	-	91.7%	8.3%
Construction and the Built Environment	N/a	N/a	42.1%	57.9%	77.0%	23.0%
Cyber Security L10	*	*	65.5%	34.5%	95.8%	4.2%
Cyber Security L11	N/a	N/a	*	*	100.0%	-
Data Science	N/a	N/a	*	*	77.8%	22.2%
Early Learning and Childcare	N/a	N/a	N/a	N/a	50.0%	50.0%
Engineering: Design and Manufacture	78.5%	21.5%	69.9%	30.1%	92.2%	7.8%
Engineering: Instrumentation, Measurement and Control	N/a	N/a	*	*	86.1%	13.9%
IT: Management for Business	81.6%	19.4%	75.0%	25.0%	85.4%	14.6%
IT: Software Development	50.0%	50.0%	37.3%	62.7%	74.2%	25.8%

## GA Employers

GA employers can be of any size and based anywhere in Scotland. From the first year of delivery to year 3 (2019/20), the number of GA employers has increased by around 260%, more than trebling the number that were engaged in the first year.

Figure 9: No. of GA employers



While most businesses employ one or two Graduate Apprentices, there are some with significantly more. For example, one large multinational company employed 30 in 2018/19 and 20 in 2019/20.

## Location of GA Employers

As a business can be present in more than one local authority (due to multiple sites), the sum of the number of employers by local authority is greater than the number of unique employers. In 2019/20, 44 GA employers were located in more than one local authority, making the total number of businesses when broken down by local authority 563 rather than 506<sup>13</sup>.

<sup>13</sup> In a small number of instances, employer local authority was not captured in our system data. Where possible, we have matched the employer with publicly available address data to assign a local authority.

Table 18: GA employers by local authority (continues on next page)

	2017-18		2018-19		2019-20	
	No.	% total	No.	% total	No.	% total
Aberdeen City	8	5.3%	29	7.0%	52	9.2%
Aberdeenshire	*	*	17	4.1%	28	5.0%
Angus	*	*	6	1.4%	11	2.0%
Argyll & Bute	*	*	*	*	6	1.1%
Clackmannanshire	-	-	*	*	*	*
Comhairle nan Eilean Siar	*	*	*	*	*	*
Dumfries and Galloway	*	*	6	1.4%	8	1.4%
Dundee City	7	4.7%	12	2.9%	15	2.7%
East Ayrshire	*	*	8	1.9%	7	1.2%
East Dunbartonshire	*	*	*	*	*	*
East Lothian	*	*	*	*	5	0.9%
East Renfrewshire	-	-	*	*	*	*
Edinburgh, City of	26	17.3%	77	18.5%	85	15.1%
Falkirk	*	*	10	2.4%	7	1.2%
Fife	*	*	19	4.6%	25	4.4%
Glasgow City	26	17.3%	63	15.1%	104	18.5%
Highland	9	6.0%	9	2.2%	21	3.7%
Inverclyde	*	*	*	*	7	1.2%
Midlothian	-	-	8	1.9%	9	1.6%
Moray	5	3.3%	7	1.7%	11	2.0%
North Ayrshire	*	*	18	4.3%	10	1.8%
North Lanarkshire	8	5.3%	30	7.2%	27	4.8%
Orkney Islands	-	-	5	1.2%	5	0.9%

Continued – Table 18: GA employers by local authority

	2017-18		2018-19		2019-20	
	No.	% total	No.	% total	No.	% total
Perth and Kinross	*	*	6	1.4%	11	2.0%
Renfrewshire	6	4.0%	14	3.4%	24	4.3%
Scottish Borders	*	*	7	1.7%	14	2.5%
Shetland Islands	*	*	*	*	5	0.9%
South Ayrshire	6	4.0%	9	2.2%	9	1.6%
South Lanarkshire	*	*	12	2.9%	16	2.8%
Stirling	*	*	8	1.9%	13	2.3%
West Dunbartonshire	*	*	*	*	8	1.4%
West Lothian	6	4.0%	16	3.8%	16	2.8%
<b>Total</b>	<b>151</b>	<b>100.0%</b>	<b>417</b>	<b>100.0%</b>	<b>563</b>	<b>100%</b>

Table 18 shows that the larger urban areas continue to represent the largest proportion of GA employers. Edinburgh had the highest number of employers in the first two years of delivery, with Glasgow just ahead in 2019/20. All local authority areas now have at least one employer with a Graduate Apprentice.

Nearly 40% of employers who were engaged in GA delivery in 2018/19 have taken additional apprentices in 2019/20. There are now 40 employers that have registered at least one Graduate Apprentice in each of the 3 years that GA has been running.



FORTH PORTS

**“Graduate Apprentices have a certain drive. They want to be here, and they want to do well. Apprenticeships help us to identify people who could be promoted within the company and become the managers and directors of the future.**




**Forth Ports is proud to support Graduate Apprenticeships. The apprentices and the company have found the programme to add value from a skills development and business impact perspective very early on.”**

**Alan McPherson**, Chief Harbour Master

## 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 2019/20, GA opportunities were realised by individuals from over 500 different employers in Scotland – up from 141 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.



“[Our apprentice’s] ability to apply the skills that have been developed through the Graduate Apprenticeship have directly contributed to reduce the downtime of the plant and increase production efficiency.”

**Karen Harbison,**  
GSK Maintenance Standardisation Manager



“Graduate Apprenticeships are a great way to bring new skills into our organisation and address the challenges presented by our industry’s aging workforce. They’ve also given us the opportunity to develop the talent we already have within the business.”

**Tom Wallace,** Account Manager



“Helping develop our Graduate Apprenticeship programme and creating opportunities through apprenticeships and life-long learning are critical to ensuring that Balfour Beatty leave a sustainable lasting legacy through our projects across Scotland.”

**Hector MacAulay,** Managing Director



“Apprenticeships are a fantastic opportunity to develop staff with the skills you need – effectively ‘growing our own’. For both the apprentice and the employer to get the most out of it, both must be fully committed.”

**Frances Ratcliffe,**  
Lead Consultant Bridges & Structures



“Graduate Apprenticeships allow us to nurture an engineer within our own company. I’d tell anyone who is offered a Graduate Apprenticeship to grab it with both hands. You’re being offered a fantastic qualification while gaining real workplace experience.”

**Marie Neilson,** Quality Manager



## Learner experience: Engineering: Design and Manufacture

36-year-old Katy Beckett works in quality management at Inchinnan's Bray Controls and was given the opportunity to broaden her technical skills.

She said: "My managing director thought I'd be a good fit for this opportunity. The Graduate Apprenticeship fits around my life and means I'm not spending lots of time away from my family.

"My university course is based on what I'm doing at work. This means I can pull what I've learned at the University of the West of Scotland into the workplace and can also apply that knowledge towards a recognised qualification."

Katy is urging more females to consider a career in science, technology, engineering and mathematics.

Having previously trained as a primary teacher, she believes she's found her calling with her Graduate Apprenticeship job.

Katy said: "It's important that women see STEM as a potential career path. There is a high number of females in engineering roles at Bray. I never considered STEM when I was at school and thankfully my Graduate Apprenticeship has allowed me to pursue it now."



**Katy Beckett**, Graduate Apprentice



# High Performing Systems

Our skills system is a critical part of Scotland's economy and must be adaptable and fit for purpose. Being able to respond to the changing needs of employers and the wider requirements of the economy, as well as appealing to learners, means that our approach to skills development must continuously evolve. The rapidity of technological change is beyond anything we have experienced before and means that businesses and people must be equipped with the requisite skills to enable greater levels of adaptability and resilience to changes we have yet to imagine.

## Responding to industry need

The world of work is evolving. Therefore, the work-based learning offered in Scotland needs to be high quality, dynamic and flexible. Skills Development Scotland is responding to the skills needs of today, and emerging future skills needs, through Scottish Apprenticeships.

Demand for Graduate Apprenticeships is employer led. They are future-focussed, available across a spectrum of growth industries that offer strong career prospects for the future.

The Scottish Apprenticeship Advisory Board has been leading the design and expansion of all apprenticeships including Graduate Apprenticeships in Scotland. As such, GAs 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.

From April 2020 the Apprenticeship Approvals Group took responsibility for approving all Scottish Apprenticeships. This is an employer-led group aimed at ensuring that Scottish Apprenticeships meet the needs of employers. This new approval process covers Foundation, Graduate and Modern Apprenticeships.

Employers have always been at the heart of the development of Graduate Apprenticeships. Through the SAAB Standards and Frameworks Group, 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 ensure 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

Scotland's engineering and advanced manufacturing sector is a key driver of the economy. It contributes £9.8 billion a year to the economy and offers high quality jobs for thousands across the country.

With an ageing workforce, it is forecast that the sector will need 13,500 new entrants in the next 10 years, and 21% of the current vacancies in the sector are as a result of skills shortages. As a result, SDS has worked with industry to create Graduate Apprenticeships in four engineering disciplines.

[skillsdevelopmentscotland.co.uk/media/46052/ssa-engineering.pdf](https://skillsdevelopmentscotland.co.uk/media/46052/ssa-engineering.pdf)

## Delivery

Graduate Apprenticeships are helping to transform the skills and learning landscape and the flexibility and relevance of learning at degree level. This is the first time that universities / Higher Education Institutions (HEIs) have been providers of work-based learning pathways.

This is a major change as the context for learning differs from traditional degree programmes and the mode of delivery is significantly weighted to the workplace and not the campus.

This means that some HEIs are making significant changes to current degree programmes; including the design of curriculum, the learning experience and new approaches to delivery and assessment. 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.

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



There are now 15 learning providers that deliver Graduate and Higher Apprenticeships – relative to 9 in 2017/18. The Universities of Aberdeen and Glasgow are the most recent learning providers to offer GAs, with their first registered apprentices in September 2019. We anticipate that the University of Stirling will begin delivering Graduate Apprenticeships from September 2020.

GA uptake in 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, they are, as can be seen from the tables in Annex 3, delivering to employers across all Scottish local authorities. For example, employers based in the Highlands and Islands are accessing up to 11 different frameworks, delivered by seven different universities.

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.

Most learning providers offer blended learning with a mix of online and offline (campus attendance) delivery as well as work-based assessments. Campus attendance can vary from one day a week (or month) to block release, with apprentices attending their university campus for several weeks every term.

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

Figure 10: GA learning providers

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

## 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.

To enable consistency, SDS is working with QAA to develop complementary processes for compliance and quality, based on annual reporting. A pilot led by SDS was established in 2019/20 with 5 learning providers across 5 different frameworks.

As part of the pilot, learning providers also mapped their existing quality assurance frameworks against the framework used for SDS National Training Programmes to identify where, if any, gaps existed in relation to Graduate Apprenticeships. This work highlighted a need to strengthen employer engagement in:

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

These points are being addressed through SDS and the pilot group.

This pilot has progressed during the last year and quality assurance methods will be disseminated to all learning providers to enable consistency going forward. We are working towards completing this work by the end of the calendar year.

## **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.

# **The future**

Skills development is an integral component of a fair, prosperous and high performing economy. Economic and technological change will continue to challenge us. We are currently facing into one of the biggest economic recessions since the second world war, where the global coronavirus pandemic has taken its toll on vast swathes of the economy.

Graduate Apprenticeships have a role to play in providing employers and individuals with relevant skills in a time where critical skills and adaptability will be a key part of our economic recovery.

## **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. Our challenge is to ensure Graduate Apprenticeship provision continues to support the pipeline of talent employers need, helping people up-skill or re-skill in occupational areas that positively contribute to Scotland's economic recovery and growth.

## Integrating meta-skills into GA design

In 2019/20, SDS began testing a model for the development of meta-skills within the context of two GA pilots in Accounting at SCQF level 10 and 11 (combining an honours degree with a professional qualification) and Early Learning and Childcare at SCQF level 9. These two frameworks have meta-skills written into them. Three learning providers have been involved in this pilot. In addition, recognising the importance of meta-skills, several other universities have voluntarily begun to include meta-skills in their frameworks. The learning from these pilot programmes is being shared with other universities. It is also informing the inclusion of meta-skills in new products across all SDS apprenticeships.

## Developing additional pathways

A core aspect of the design of work-based learning pathways is the variety of entry and exit points in the journey, and permeability between qualifications, giving learners greater choice. To further progress this, additional pathways into GAs are being developed. We are currently exploring:

- The development of an Engineering pathway to support individuals' progress through apprenticeships at SCQF Levels 6 and 8 into a Graduate Apprenticeship at SCQF Level 10.
- The development of a Project Management apprenticeship at SCQF Level 8 and new pathway into the Business Management GA at Level 10.
- A further additional option within the Business Management GA for Business Improvement (Business Analysis) to create new provision in this area and support progression.

- Key modules that may be used across several GA frameworks where there is a common requirement across different occupations.

## Future Funding for Graduate Apprenticeships

Scottish Government's economic recovery plans put a focus on youth employment, training and apprenticeships with a commitment to further embedding Graduate Apprenticeships as part of the wider college and university provision. We are working closely with SFC, and in partnership with colleges and universities, to develop a plan for delivery for 2021/22.

As highlighted in the recent OECD report<sup>14</sup>, learning that is centred in the workplace offers great benefits for individuals and businesses and is essential for economic recovery. Led by the work of SAAB, we are excited to continue the delivery of Graduate Apprenticeships, recognising the potential that they have to offer and the impact they can have for workplace innovation, productivity and Scotland's economy.

<sup>14</sup> OECD (2020), Strengthening Skills in Scotland: OECD Review of the Apprenticeship System in Scotland, OECD Publishing, Paris

# Annex 1: GA uptake by framework and age band

GA framework	2017-18					2018-19						2019-20					
	Age bands																
	16-19	20-24	25-34	35+	Total	16-19	20-24	25-34	35-49	50+	Total	16-19	20-24	25-34	35-49	50+	Total
Accounting	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	14	7	9	8	-	38
Business Management	N/a	N/a	N/a	N/a	N/a	21	47	79	133	14	294	25	62	114	100	9	310
Business Management: Financial Services	N/a	N/a	N/a	N/a	N/a	*	7	6	*	-	20	-	-	-	-	-	-
Civil Engineering L10	*	9	*	-	12	18	43	30	10	-	101	34	54	27	9	-	124
Civil Engineering L8	*	21	8	*	35	7	9	8	-	-	24	*	9	-	*	*	12
Construction and the Built Environment	N/a	N/a	N/a	N/a	N/a	22	20	13	*	*	64	39	37	36	9	-	121
Cyber Security L10	-	*	*	*	6	*	18	10	18	*	54	*	13	15	19	*	52
Cyber Security L11	N/a	N/a	N/a	N/a	N/a	-	*	*	11	6	25	-	*	13	30	*	53
Data Science	N/a	N/a	N/a	N/a	N/a	*	*	-	-	-	17	11	*	14	13	*	46
Early Learning and Childcare	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	9	5	9	*	-	30
Engineering: Design and Manufacture	8	29	23	5	65	22	52	35	14	-	123	19	35	47	30	-	131
Engineering: Instrumentation, Measurement and Control	N/a	N/a	N/a	N/a	N/a	*	*	9	7	-	24	*	6	19	8	*	36
IT: Management for Business	13	11	15	26	65	*	18	9	13	*	46	*	15	20	12	*	52
IT: Software Development	29	36	17	13	95	51	43	27	8	-	129	55	35	38	22	5	155
<b>Total</b>	<b>55</b>	<b>108</b>	<b>66</b>	<b>49</b>	<b>278</b>	<b>172</b>	<b>268</b>	<b>230</b>	<b>226</b>	<b>25</b>	<b>921</b>	<b>217</b>	<b>288</b>	<b>361</b>	<b>268</b>	<b>26</b>	<b>1,160</b>
Percentage of total	19.8%	39.8%	23.7%	17.6%		18.7%	29.1%	25%	24.5%	2.7%		18.7%	24.8%	31.1%	23.1%	2.2%	

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

	2017-18				2018-19				2019-20			
	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%	48	5.2%	73	7.9%	58	5.0%	90	7.8%
Aberdeenshire	13	4.7%	*	*	53	5.8%	26	2.8%	69	6.0%	40	3.4%
Angus	11	4.0%	*	*	31	3.4%	17	1.8%	27	2.3%	18	1.6%
Argyll & Bute	*	*	*	*	*	*	*	*	10	0.9%	13	1.1%
Clackmannanshire	*	*	-	-	*	*	*	*	*	*	*	*
Comhairle nan Eilean Siar	*	*	*	*	*	*	*	*	*	*	*	*
Dumfries & Galloway	*	*	*	*	8	0.9%	7	0.8%	23	2.0%	20	1.7%
Dundee City	9	3.2%	17	6.1%	27	2.9%	32	3.5%	20	1.7%	32	2.8%
East Ayrshire	5	1.8%	*	*	22	2.4%	10	1.1%	31	2.7%	11	1.0%
East Dunbartonshire	6	2.2%	*	*	25	2.7%	*	*	29	2.5%	*	*
East Lothian	6	2.2%	*	*	17	1.8%	*	*	10	0.9%	6	0.5%
East Renfrewshire	*	*	*	*	15	1.6%	*	*	18	1.6%	*	*
Edinburgh, City of	23	8.3%	38	13.7%	93	10.1%	182	19.8%	98	8.5%	198	17.3%
Falkirk	9	3.2%	6	2.2%	32	3.5%	12	1.3%	37	3.2%	13	1.1%
Fife	9	3.2%	5	1.8%	71	7.7%	52	5.6%	83	7.2%	52	4.5%
Glasgow City	28	10.1%	90	32.4%	72	7.8%	169	18.3%	114	9.8%	264	22.8%
Highland	12	4.3%	11	4.0%	23	2.5%	17	1.8%	41	3.5%	41	3.5%
Inverclyde	*	*	*	*	10	1.1%	9	1.0%	26	2.2%	17	1.5%
Midlothian	*	*	-	-	14	1.5%	11	1.2%	23	2.0%	13	1.1%
Moray	6	2.2%	6	2.2%	17	1.8%	15	1.6%	13	1.1%	13	1.1%
North Ayrshire	13	4.7%	*	*	34	3.7%	28	3.0%	28	2.4%	17	1.5%
North Lanarkshire	20	7.2%	10	3.6%	80	8.7%	87	9.4%	83	7.2%	79	6.8%
Orkney Islands	-	-	-	-	11	1.2%	11	1.2%	10	0.9%	9	0.8%
Perth & Kinross	*	*	*	*	13	1.4%	10	1.1%	32	2.8%	28	2.4%
Renfrewshire	18	6.5%	6	2.2%	31	3.4%	24	2.6%	73	6.3%	48	4.1%
Scottish Borders	*	*	*	*	10	1.1%	9	1.0%	28	2.4%	24	2.1%
Shetland Islands	*	*	*	*	*	*	*	*	6	0.5%	7	0.6%
South Ayrshire	9	3.2%	9	3.2%	20	2.2%	17	1.8%	17	1.5%	16	1.4%
South Lanarkshire	21	7.6%	9	3.2%	65	7.1%	37	4.0%	63	5.4%	33	2.8%
Stirling	5	1.8%	*	*	10	1.1%	12	1.3%	15	1.3%	14	1.2%
West Dunbartonshire	10	3.6%	*	*	14	1.5%	6	0.7%	20	1.7%	12	1.0%
West Lothian	13	4.7%	9	3.2%	40	4.3%	32	3.5%	50	4.3%	25	2.2%
<b>Total</b>	<b>278</b>	<b>100.0%</b>	<b>278</b>	<b>100.0%</b>	<b>921</b>	<b>100.0%</b>	<b>921</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>	<b>1,160</b>	<b>100.0%</b>

## 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	7	23
Robert Gordon University	-	-	-	-	19	10	29
University of Dundee	12	-	-	*	13	*	30
University of Strathclyde	-	-	-	32	-	-	32
University of the Highlands and Islands	-	18	-	-	-	-	18
University of The West of Scotland	-	-	-	*	-	*	21
<b>Grand Total</b>	<b>12</b>	<b>35</b>	<b>6</b>	<b>65</b>	<b>65</b>	<b>95</b>	<b>278</b>

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	-	-	-	-	16	19	107
Glasgow Caledonian University	39	-	16	-	16	32	12	-	12	-	-	33	160
Glasgow Kelvin College	-	-	-	12	-	-	-	-	-	-	-	-	12
Heriot-Watt University	58	9	16	-	16	-	-	-	29	-	13	18	159
Queen Margaret University	15	-	-	-	-	-	-	-	-	-	-	-	15
Robert Gordon University	55	11	-	-	14	-	-	-	22	24	12	6	144
The Open University	-	-	-	-	-	7	13	-	-	-	-	*	24
University of Dundee	23	-	15	-	-	-	-	-	11	-	5	*	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
<b>Grand Total</b>	<b>294</b>	<b>20</b>	<b>101</b>	<b>24</b>	<b>64</b>	<b>54</b>	<b>25</b>	<b>17</b>	<b>123</b>	<b>24</b>	<b>46</b>	<b>129</b>	<b>921</b>

2019-20	AC	ELC	BM	CE L10	CE L8	CBE	CS L10	CS L11	DS	EDM	EIMC	ITMB	ITSD	Total
Edinburgh Napier University	-	-	23	14	-	46	24	-	11	8	-	12	22	160
Glasgow Caledonian University	-	-	58	23	-	34	8	18	-	22	-	-	34	197
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	-	-	*	19	29	*	-	182
The Open University	-	-	-	-	-	-	20	*	-	-	-	-	*	38
University of Aberdeen	-	-	-	*	-	-	-	-	-	-	-	-	-	*
University of Dundee	-	-	25	14	-	-	-	-	-	7	-	*	*	58
University of Edinburgh	-	-	-	-	-	-	-	*	*	-	-	-	-	8
University of Glasgow	-	-	-	-	-	-	-	-	-	-	-	-	34	34
University of St Andrews	-	-	-	-	-	-	-	-	5	-	-	-	-	5
University of Strathclyde	-	-	41	19	-	-	-	23	-	38	-	-	31	152
University of the Highlands and Islands	-	15	-	*	*	-	-	-	-	-	-	-	-	22
University of The West of Scotland	-	15	38	27	-	-	-	-	-	15	-	-	8	103
<b>Grand Total</b>	<b>38</b>	<b>30</b>	<b>310</b>	<b>124</b>	<b>12</b>	<b>121</b>	<b>52</b>	<b>53</b>	<b>46</b>	<b>131</b>	<b>36</b>	<b>52</b>	<b>155</b>	<b>1,160</b>

Key:

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



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