

# Monitoring Ireland's Skills Supply **2023**



# Monitoring Ireland's Skills Supply 2023

Trends in education and training awards

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# List of Abbreviations

CSO	Central Statistics Office
I/ECDL	International/European Computer Driving Licence
ETB	Education and Training Board
ETBI	Education and Training Boards Ireland
Eurostat	Statistical Office of the European Union
FET	Further Education and Training
HE	Higher Education
HEA	Higher Education Authority
IAASA	Irish Auditing and Accounting Supervisory Authority
ICT	Information Communications Technology
n.e.c.	Not elsewhere classified
NFQ	National Framework of Qualifications
PLSS	Programme and Learner Support System
QQI	Quality and Qualifications Ireland
SSBL	Social Science, Business and Law
STEM	Science, Technology, Engineering and Manufacturing

# Summary

## Potential supply of skills from further and higher education in Ireland

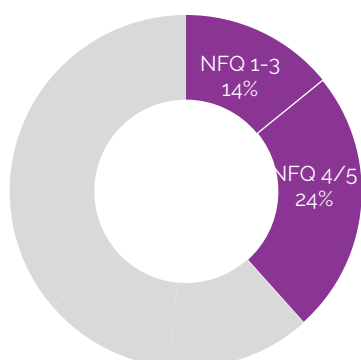
141,000 awards in 2022	The number of awards made across the FET and higher education system in 2022 were down 1% (approximately 1,500 awards) on the previous year. The number of awards in 2022 was 8% higher (8,750 additional awards) than in 2018.*	
7,900 Science awards	Science made up 6% of awards in 2022	+3% compared to 2021* +16% compared to 2018*
10,500 ICT awards	ICT made up 7% of awards in 2022	-2% compared to 2021* +33% compared to 2018*
11,890 Engineering awards	Engineering made up 8% of awards in 2022	+14% compared to 2021* +24% compared to 2018*
3,460 Construction awards	Construction made up 2% of awards in 2022	-4% compared to 2021* +45% compared to 2018*
43,300 SSBL awards	Social science, business and law (SSBL) made up 31% of awards in 2022	-4% compared to 2021* +16% compared to 2018*
24,400 Health & welfare awards	Health/welfare made up 17% of awards in 2022	-3% compared to 2021* -2% compared to 2018*

8,700 Services awards	Services made up 6% of awards in 2022	-32% compared to 2021* -22% compared to 2018*
5,400 Agriculture awards	Agriculture made up 4% of awards in 2022	+16% compared to 2021* -1% compared to 2018*
8,000 Education awards	Education made up 6% of awards in 2022	+4% compared to 2021* +12% compared to 2018*
12,800 Arts/humanities awards	Arts/humanities made up 9% of awards in 2022	-6% compared to 2021* -7% compared to 2018*
*Note: the changes over time exclude non-QQI FET awards from the SOLAS/ETBI PLSS.		

Source: HEA, QQI, SOLAS/ETBI, IAASA and Irish Tax Institute

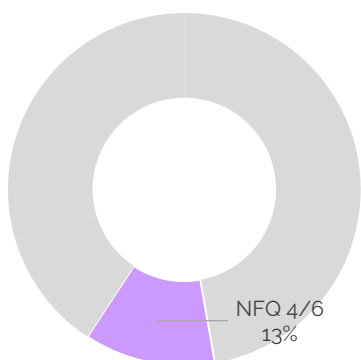


## Education profile of adults (20-74 years) by level, Q2 2023



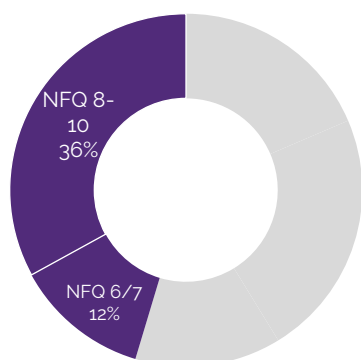
### Second Level Education

- 14% of Ireland's adult population held at most a **level 3 qualification**; persons at this level are more likely to be in the older age cohorts with 242,200 (49%) aged 60-74 years.
- 24% held a Leaving Cert or equivalent (NFO level 4/5)



### Further Education and Training

- 13% of Ireland's 20-74-year-olds held **FET qualifications**, representing 453,200 persons.
- There were slightly more female than male FET holders at **NFO level 4-6**, with 53% female and 47% male.
- For most age cohorts, the share of FET qualification holders was similar, ranging from 9% of 20-24-year-olds to 16% for 50-54-year-olds.



### Third Level (NFO 6-10)

- Just over one in ten 20-74-year olds, (12%) had a third level qualification at NFO level 6/7, representing 414,500 persons.
- **More than one third** of Ireland's adults (36%) held third level qualifications at **NFO levels 8-10** comprising 1,244,200 persons.
- Therefore, almost half (48%) of all adults (20-74 years old) in Ireland held a third level qualification.

Source: SLMRU analysis of CSO (LFS) data

Excludes not stated

# 1. Introduction

This report, *Monitoring Ireland's Skills Supply 2022*, is the 17<sup>th</sup> in a series of annual reports produced by the Skills and Labour Market Research Unit (SLMRU) aimed at monitoring the potential supply of skills to the labour market from Ireland's education and training system. Not all education and training graduates will enter the labour market: some may remain in education for further studies, travel abroad, or not enter the labour market due to family commitments or other reasons. Others may already be in the workforce and therefore do not represent a new supply of skills. Bearing in mind these caveats, the analysis of the education/training outputs by level and field presented here is an overview of how Ireland's education and training can contribute to meeting the skills needs of the economy. For this reason, this report also provides an analysis of the skills profile of Ireland's adult population.

Monitoring Ireland's Skills Supply serves as a companion publication for the National Skills Bulletin, where the focus is on the demand for skills in Ireland. When taken together, these two reports provide a comprehensive summary of the demand and supply of skills in Ireland.

This report is comprised of two separate parts. Sections 1-12 examine the number of awards made to learners in Ireland's further and higher education and training system. Following a summary in the Overview section, awards are broken down by field of learning and NFQ level (where applicable). Section 13 and 14 focus on the existing skills profile of (a) the adult population and (b) recent graduates, drawing on data from Ireland's Labour Force Survey.

## Data used in this report

**Further education and training (FET)** data was obtained from two sources. QQI-FET data is from Quality and Qualifications Ireland's awards database. Only major awards are included as those in receipt of other award types may receive more than one award in any given year. While SOLAS/ETBs are the largest provider types, other providers include Teagasc, Bord Iascaigh Mhara, among others. All QQI-FET data refers to the five-year period 2018 to 2022.

**Other FET** data is from the SOLAS/ETBI Programme and Learner Support System (PLSS). It excludes learners in receipt of QQI awards as these were already included in the QQI-FET data. The PLSS is a relatively new system which was fully rolled out from mid-2018 only. Therefore the 'Other FET' category does not figure in the five-year time series analyses in this report<sup>1</sup>. The data reported here is for 2022 (the latest available).

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<sup>1</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

While some of the awards included in the 'Other FET' category have been placed on other countries' National Qualifications Frameworks (e.g. UK-based awards) and can, as a result, be referenced to the Irish NFQ, other FET awards in this category are not aligned to any European framework; these awards, in this report, are referred to as 'non-aligned FET'.

Third level data was also obtained from two sources. Third level (HEA) data is from the Higher Education Authority's Student Record System. It includes awards made to learners at each of Ireland's universities (including the technical universities), institutes of technology, and colleges (e.g. RCSI, NCAD and St. Angela's). HEA data in this report spans the five-year period 2017/18 to 2021/2022.

QQI-HE data was obtained from Quality and Qualifications higher education awards data (excluding those made to learners at institutes of technology, which are already included in the HEA data). This data represents the major awards made to learners at private, independent colleges, including Griffith College, Dublin Business School, Hibernia College. It should be noted that these colleges also make awards through other awarding bodies (e.g. UK awarding bodies) for which data is unavailable. All QQI-HE data is for the five years 2018 to 2022.

In terms of awards, this report also includes data in relation to persons obtaining qualifications from professional bodies including the Irish Auditing and Accounting Supervisory Authority (IAASA) and the Irish Tax Institute.

It is important to note that the data in this year's report is not comparable with that for last year, as the reference year is now the same for all data sources: HEA, QQI and PLSS/ETBI data all refer to the same year, with the most recent being 2022<sup>2</sup>.

European comparison data is from the EU database, Eurostat and provides the share of third level graduates by discipline for each EU country as well as the employment/unemployment rates of persons by education attainment level. In addition, Eurostat data was collected and analysed on the rate of early leavers from education/training and individuals' level of digital skills in Ireland and the EU, which comprises a new section in this year's report.

Labour Force Survey data is from the Central Statistics Office and, in the report, focuses on the educational profile of adults in Ireland. It looks at the educational attainment level of adults aged 20-74 years old, as well as a subset of this cohort (recent graduates).

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<sup>2</sup> In last year's report (published in 2022), the data for HEA and QQI awards related to the year 2020, while PLSS awards related to the year 2021. Therefore, a report has not been compiled for all awards in 2021. However, additional analysis was carried out to compile data on 2021 awards for inclusion in the Summary in this report.

## Data Classifications

### Education levels

The two main classifications used to analyse **education levels** in this report are Ireland's National Framework of Qualifications (NFQ) and UNESCO's International System of Education Classification (ISCED) levels of education. The NFQ describes the level of the award obtained on successful completion of a relevant programme, while ISCED levels of education refers to the level of the programme. Table A1 in the Appendix details the award types at each NFQ level, as well as the programmes in the education system that typically prepare learners for such awards.

### Fields of education and training

ISCED fields of learning classifications are also used in the analysis. For ease of reading, some field names have been shortened. In addition, in instances where numbers are too small to report, some fields have been grouped. Column 1 of Table 1.1 shows the broad fields of learning according to the ISCED classification, along with an example of specific subjects covered in these areas. Column 2 (Grouped/Abbreviated Fields) shows the fields of education and training that were grouped for the analysis of education awards data.

**Table 1.1 ISCED fields of education and training**

ISCED Field <sup>3</sup>	Grouped/Abbreviated Fields
<b>STEM subjects</b>	
Science & mathematics e.g. biological & biomedical sciences	Science & mathematics
ICT e.g. computer science	ICT
Engineering, manufacturing & construction e.g. civil engineering	Engineering, manufacturing & construction
<b>Health, vet and agriculture subjects</b>	
Health & welfare e.g. healthcare assistant	Health
Agriculture, forestry & veterinary e.g. agricultural science	Agriculture & vet
<b>Other subjects</b>	
Social sciences journalism & information e.g. economics, psychology	Social science, business and law (SSBL)
Business, administration & law e.g. accounting, sales	
Generic programmes & qualifications e.g. literacy training, Leaving certificate,	Generic etc.
Interdisciplinary programmes (occurs in Labour Force Survey data only)	
Education e.g. primary teaching	Education
Arts & humanities e.g. graphic design, English	Arts, etc
Services e.g. professional cookery, culinary arts, hairdressing, security	Services

<sup>3</sup> The International Standard Classification of Education (ISCED) was first developed in the mid-1970's and has since been revised, most recently in 2013. See <https://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-fields-of-education-and-training-2013-detailed-field-descriptions-2015-en.pdf>

## 2. Awards overview

### Awards

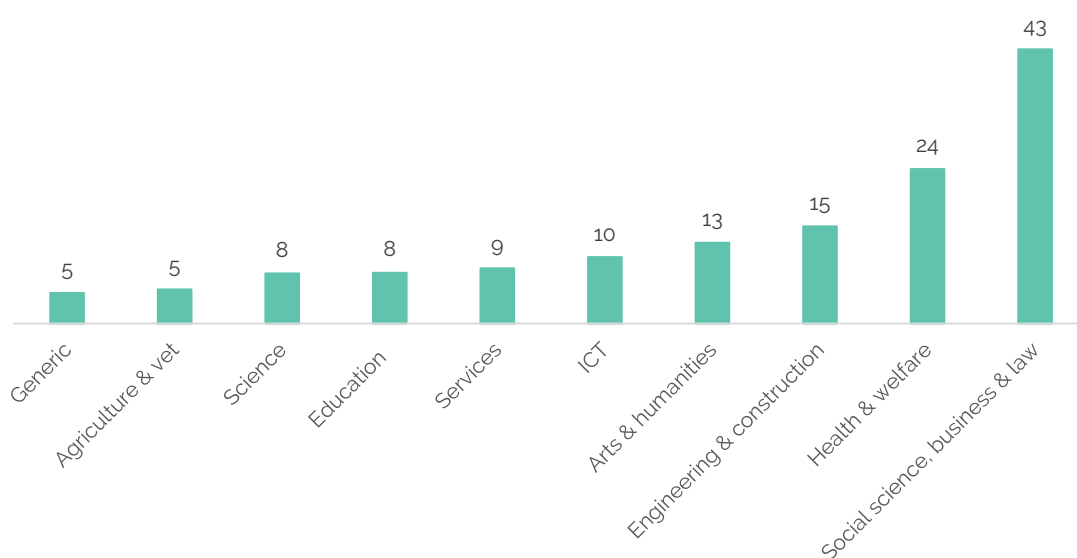
#### How many awards were made in 2022?

In 2022, approximately 141,000 awards were made in Ireland's further and higher education and training systems. This number comprises learners gaining awards or qualifications in the FET sector (both QQI and non-QQI awarding bodies), the third level sector (both HEA-aided and non-HEA-aided institutes) and through selected professional bodies (e.g. accountancy).

#### In what fields of learning were most awards made?

As in preceding years, the highest number of awards were made to learners who had studied programmes in the social science, business and law field, followed by the health and welfare field (Figure 2.1). Combined these two fields accounted for almost 67,700, representing nearly one half (48%) of all awards made in 2022. STEM subjects (i.e. science, ICT and engineering, etc.) made up more than 33,700 awards (or 24% of the total).

Figure 2.1 Further & higher education awards and prof. qualifications by field (000s), 2022

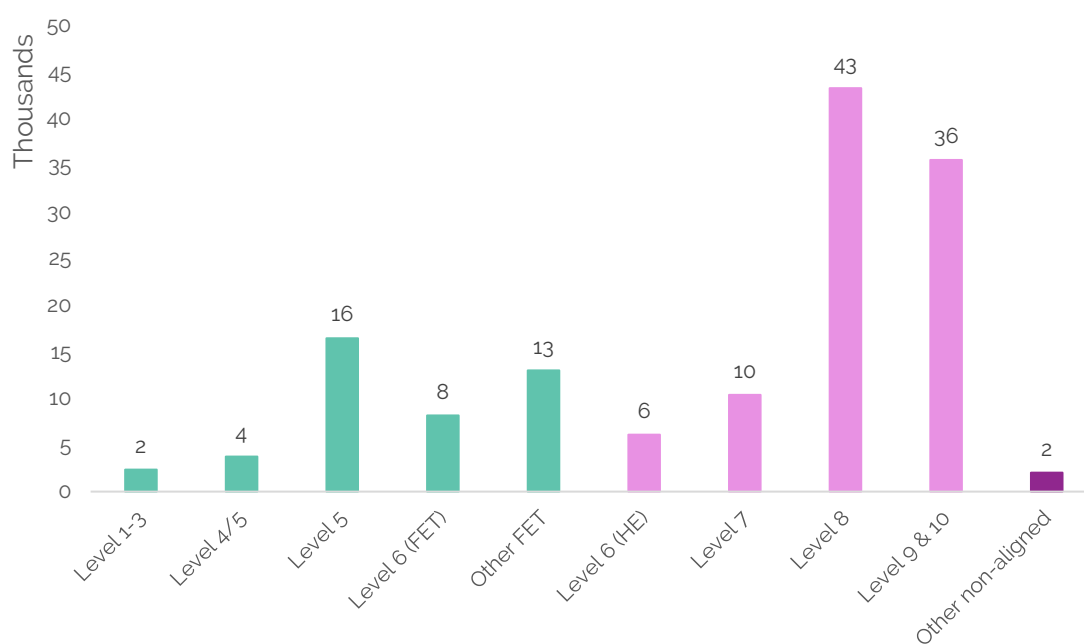


Source: HEA, QQI (FET & selected HE), SOLAS/ETBI, IAASA and Irish Tax Institute

## At what levels were awards made in 2022?

Figure 2.2 shows the number of awards made by NFQ level in 2022. Third level awards at levels 6-8 on the NFQ accounted for 42% (almost 60,000 awards), the vast majority of which (just over 43,000) were at level 8, typically for honours bachelor degrees. Awards at levels 9 and 10 made up a further quarter (25%). FET awards, the majority of which were either on or aligned to the NFQ, made up almost a third (31%) representing almost 44,000 awards. Other non-NFQ-aligned qualifications (e.g. from professional bodies) made up 1%.

**Figure 2.2 Awards (000s) by NFQ level and sector, 2022**



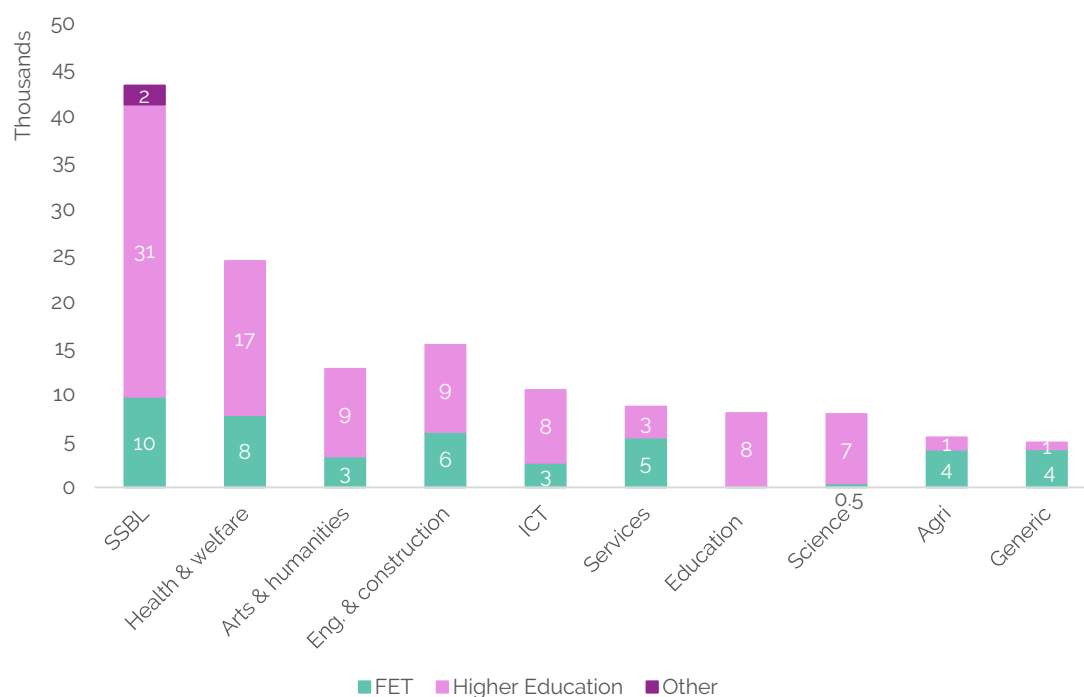
Source: HEA, QQI, SOLAS/ETBI. IAASA, Irish Tax Institute

## Awards by field and sector

Figure 2.3 shows the number of awards made by field and sector. At almost 9,800, the largest number of FET awards (NFQ and non-aligned awards (i.e. other FET)) was for social science, business and law programmes, followed by health and welfare, with 7,800 awards. Engineering and construction came next with nearly 6,000 FET awards. Similar to the FET sector, the largest number of higher education awards (NFQ 6-10), were made in social science, business and law (with nearly 31,500 awards) and health and welfare (approximately 16,500 awards). This was followed by arts and humanities where there were 9,400 higher education awards, which was similar to those for engineering and construction (at 9,395 awards).

While for most fields of learning, higher education awards outnumbered FET awards, the number of FET awards was higher for three fields: generic programmes, agriculture and vet, and services, where FET sector awards accounted for 85%, 76% and 62% of all awards made in these fields, respectively. The other category refers to professional awards, which relate to social science, business and law awards only (specifically in the areas of accountancy and tax).

**Figure 2.3 Awards (000s) by broad level and field of learning, 2022**



Source: HEA, QQI, SOLAS/ETBI, IAASA, Irish Tax Institute

## What has changed compared to one year ago?

### Changes by NFQ level

Between 2021 and 2022, the number of awards made across the FET, higher and professional education sectors fell slightly by 1%, or approximately 1,500 awards (Figure 2.4)<sup>4</sup>. In absolute terms, the largest falls were in the higher education sector, with approximately 2,200 fewer awards; the 10% increase in level 9 awards (+3,150 awards) was not enough to offset the falls at other NFQ levels, most notably the 2,200 fewer awards at level 6 (-27%) and 1,750 fewer awards (-4%) at level 8.

<sup>4</sup> The total number of awards in 2021 was approximately 142,500 compared to 141,000 in 2022.



Some of the fall in higher education awards was countered by a small rise in FET awards (+1.5% or almost +650 awards), although this masks a fall of almost 1,700 awards (-9%) at level 5 in the FET sector.

**Figure 2.4 Awards (000s) by NFQ level, 2021 and 2022**



Source: HEA, QQI, SOLAS/ETBI, IAASA, Irish Tax Institute

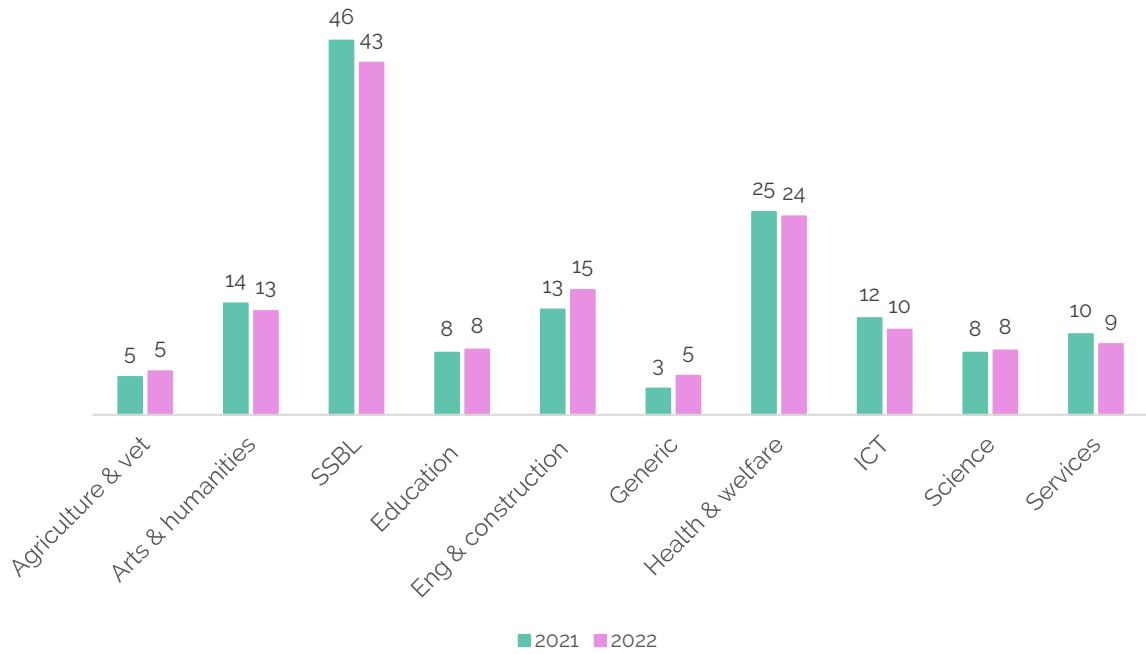
### Changes by field of learning

Despite the 1% decline that occurred between 2021 and 2022, the number of awards rose for five fields: engineering and construction and generic programmes had the largest absolute increases, with an additional 2,400 and almost 1,600 awards respectively. Smaller increases occurred for agriculture and veterinary programmes (+730), education (+380) and science (+290). The higher number of engineering and construction awards between 2021-22 was largely due to the rise in level 6 and other FET awards, which increased by approximately 1,000 (+55%) and 1,150 (+135%) awards respectively (especially engineering awards), while level 9/10 higher education awards also rose by 350 awards (+14%).

However, declines in the remaining fields exceeded these increases. There were particularly large falls, in absolute terms, for social science, business and law (SSBL), where there were 2,750 fewer awards year-on-year (-6%); the largest fall in absolute terms was in other FET (-1,070 awards) followed by a decline of approximately 900 higher education awards at both levels 6/7 (-900 awards) and 8 (-890 awards) (while level 9/10 awards rose by 450 awards). The ICT field had the second largest absolute decrease, with approximately 1,400 less awards (representing a 12% decline, due mostly to a fall in awards in the Other FET category (-1,300). This was followed by services, which declined

by 12% (approximately 1,200 fewer awards), largely accounted for by a decline of 67% in level 6/7 higher education awards (-1,880 approximately).

**Figure 2.5 Awards (000s) by field 2021 and 2022**



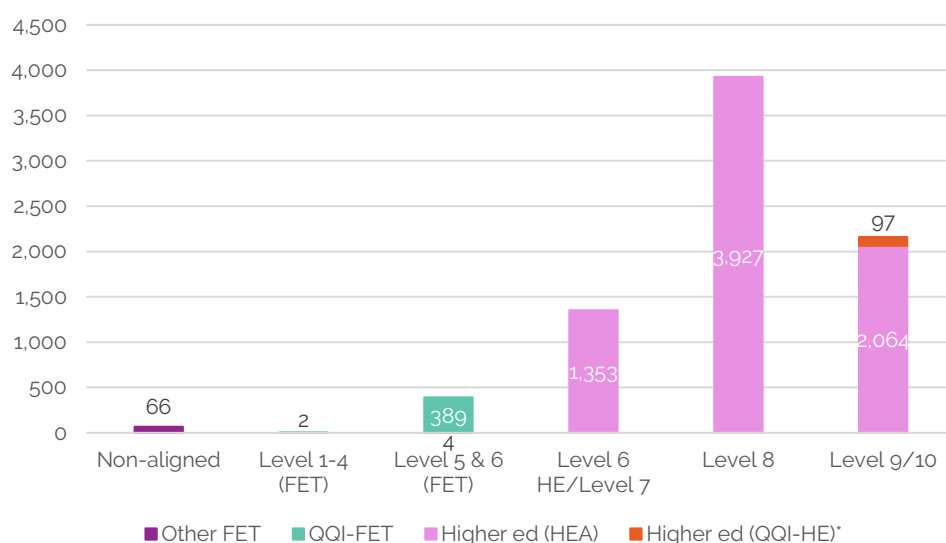
Source: HEA, QQI, SOLAS/ETBI, IAASA, Irish Tax Institute

### 3. Science Awards

#### How many awards were made in the science field in 2022?

- There were approximately 7,900 awards in science-related subjects in 2022 (Figure 3.1).
- This field accounted for 6% of all awards in 2022.
- Science awards are concentrated in the higher education sector, with 94% of all awards made in 2022 at levels 6-10; the FET sector accounted for just 6%, one of the smallest shares observed across all fields of learning, except the education field.
- The highest number of awards were made at NFQ level 8 (slightly more than 3,900 awards), accounting for half of all awards made in this field.
- With 384 awards in 2022, science subjects accounted for the largest number of PhDs awards; (the next highest number awards was 309, issued for those who studied programmes in social science, business and law).

**Figure 3.1 Awards in science by NFQ level and sector, 2022**



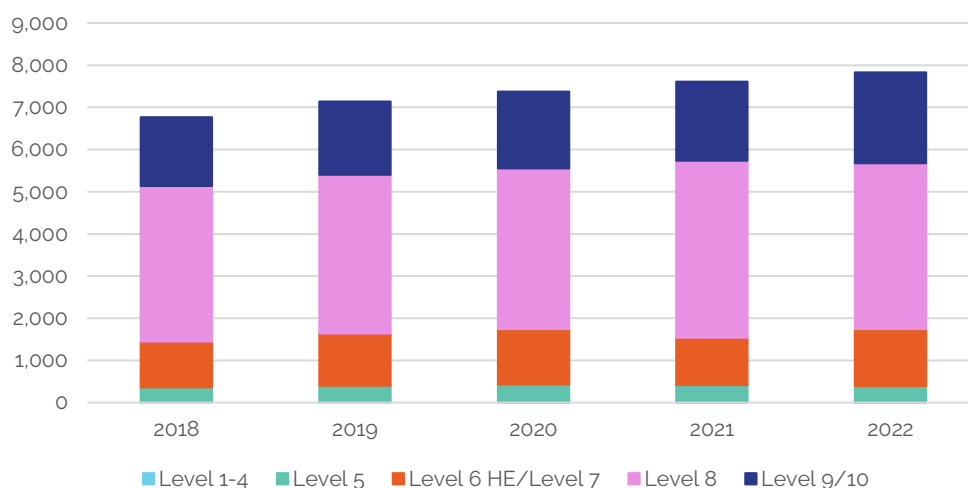
Source: HEA, QQI, SOLAS/ETBI

*\*Higher ed (QQI-HE) awards include only major awards those made to learners at private, independent colleges and other non-HEA aided institutions.*

## How does this compare to preceding years<sup>5</sup>?

- Between 2018 and 2022, the number of science awards grew by 16%, amounting to nearly 1,100 additional awards (Figure 3.2).
- The largest increases were at level 9/10 (just over 500 additional awards) and level 6 HE/level 7 (almost 270 awards).
- The number of FET awards also increased, albeit from a small base, due to the rise in level 5 awards, which went up by 7%, going from 365 in 2018 to nearly 390 in 2022 (the only exception to this being a slight fall to 416 awards in 2021); the growth was due primarily to an increased number of awards for laboratory techniques (27 extra awards over the period 2018-2022).
- Between 2021 and 2022, the total number of science awards rose by 3% (222 extra awards).

Figure 3.2 Awards in science related subjects by NFQ level and year, 2018-2022\*



Source: HEA, QQI

\*Level 1-4 comprised fewer than 5 QQI-FET awards in the years 2020-2022

## How do the 2022 awards breakdown by detailed field?

**Biological, environmental & related sciences:** With nearly 4,600 awards in 2022, biological, environmental and related sciences accounted for more than a half (58%) of all science awards (Table 3.1). Of these, approximately 1,400 were for programmes in **medical, biomedical and pharmaceutical-related** areas, which increased compared to the previous year 2021 (by almost 300 additional awards), all of which were in higher education. Also, the number of biomedical awards rose from approximately 260 in 2021 to 480 in 2022 with

<sup>5</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

most at level 8, while those related to the environment (including environmental sciences) in this field increased from 780 in 2021 to 920 in 2022.<sup>6</sup>

**Physical sciences:** chemistry made up 58% of the 1,710 awards in the physical sciences, with just over almost 440 for pharmaceutical related areas. Physics courses led to approximately 380 awards (typically at level 8) and earth sciences (e.g. marine or geosciences) courses led to 200 awards. Between 2021 and 2022, the number of awards in physical sciences fell slightly (165 fewer awards), but the number of awards in physics and chemistry increased by approximately 40 and 50 respectively.

**Maths and statistics:** this included approximately 280 awards in data analytics related areas which increased from 250 in 2021, most of which were at level 9<sup>7</sup>; the number of maths and statistics awards increased from 760 in 2018 to more than 1,000 in 2022.

**Table 3.1 Science awards by sector, NFQ level and detailed field, 2022\***

2022 awards	FET			Higher Education			Total
	NFQ 5	NFQ 6	Other	NFQ 6 (HE)/7	NFQ 8	NFQ 9/10	
<b>Biological, environmental &amp; related, of which</b>				<b>1,109</b>	<b>2,307</b>	<b>1,146</b>	<b>4,562</b>
<i>Biology</i>				52	619	137	808
<i>Biochemistry</i>				151	443	295	889
<i>Environment</i>				209	298	412	919
<b>Physical sciences, of which</b>				<b>234</b>	<b>988</b>	<b>490</b>	<b>1,712</b>
<i>Chemistry</i>				177	563	253	993
<i>Physics</i>				39	203	140	382
<b>Maths and statistics &amp; other science not further defined**</b>	<b>389</b>	<b>4</b>	<b>66</b>	<b>10</b>	<b>632</b>	<b>428</b>	<b>1,529</b>
<b>QQI-HE</b>						<b>97</b>	<b>97</b>
<b>Total awards</b>	<b>389</b>	<b>4</b>	<b>66</b>	<b>1,353</b>	<b>3,927</b>	<b>2,161</b>	<b>7,900</b>

Source: HEA, QQI, SOLAS/ETBI

\*Excludes a small number (<10) of non-QQI awards made to learners in the FET sector.

\*\*The Maths and statistics sub-field was combined with other science not further defined for confidentiality reasons.

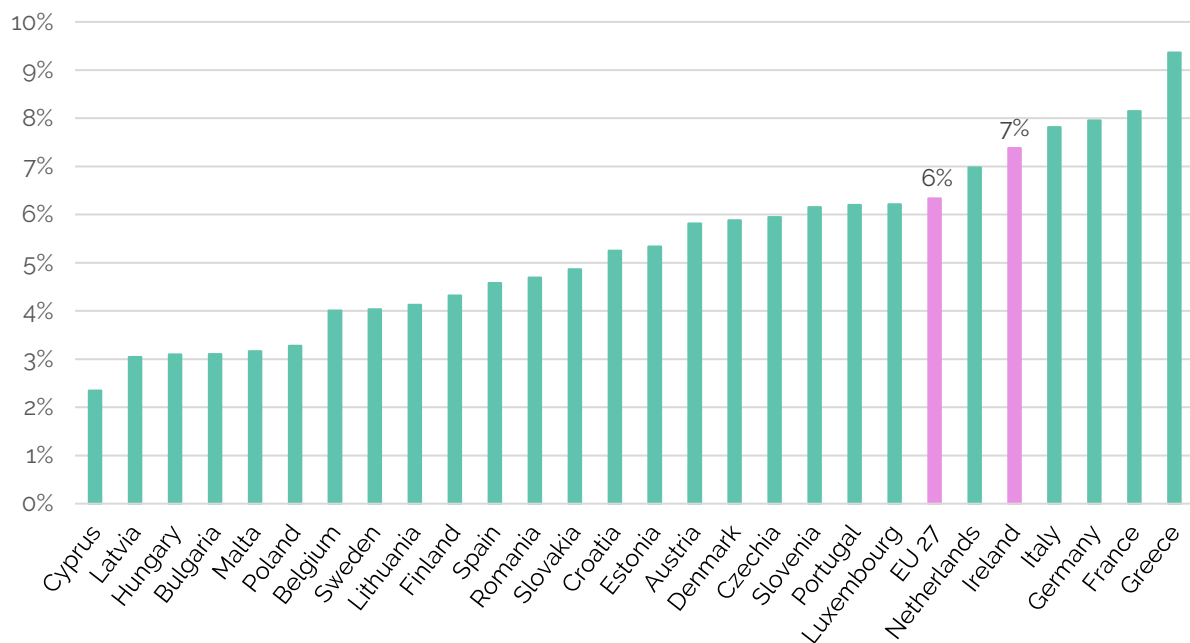
<sup>6</sup> This is based on the number of awards under the three ISCED detailed fields Environmental sciences (0521), Natural environments and wildlife (0522) and Environment not further defined or elsewhere classified (0520).

<sup>7</sup> This comprises the number of awards with 'data' in the course name for the Mathematics and Statistics detailed fields, e.g. data analytics, data analysis, big data etc. Further data analytics awards were made in the ICT field. See Section 4.

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

Ireland's share of third level graduates who had studied science subjects was the 5th highest in the EU, at 7%, just above the EU 27 average of 6% in 2021 (Figure 3.3). Ireland's strong performance in science is due in part to a higher than average share of graduates in biological sciences (including biochemistry) and environmental sciences.

**Figure 3.3 Science graduates as a share of total third level graduates, 2021**



Source: Eurostat (date extracted 17.08.2023)

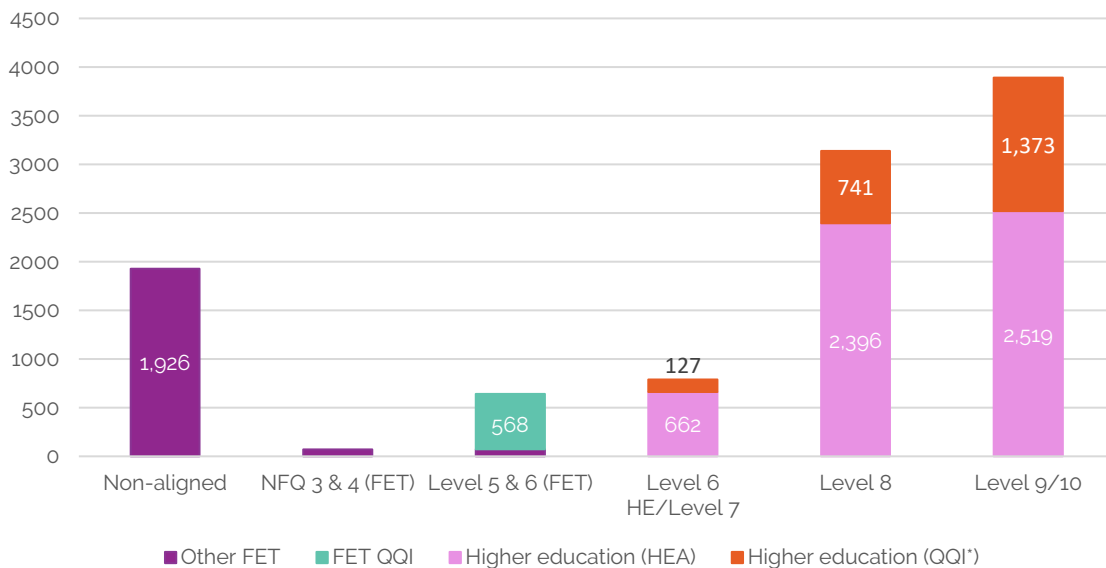
# 4. ICT Awards

## How many awards were made in the ICT field in 2022?

In order to avoid over-estimating the potential supply of skills to ICT occupations (as outlined in the National Skills Bulletin), some FET awards (e.g. ECDL and basic MS Office awards) were deemed to be more relevant to the social science, business and law field and are therefore excluded from the analysis of ICT awards data in this section.

- There were almost 10,500 awards in ICT-related subjects in 2022, nearly 2,250 of which were QQI higher education major awards made to learners in colleges outside the HEA-aided sector (Figure 4.1).
- This field accounted for 7% of all awards in 2022.
- ICT awards were concentrated at the higher end of the National Framework of Qualifications, with just over two thirds (67%) of the total in this field made at levels 8-10.
- The non-aligned QQI FET category included awards from CompTIA, CISCO, Microsoft, among others.
- Not included in these numbers were over 310 special purpose and minor awards made to learners in private third level colleges by QQI.

**Figure 4.1 Awards in ICT by NFQ level and sector 2022**



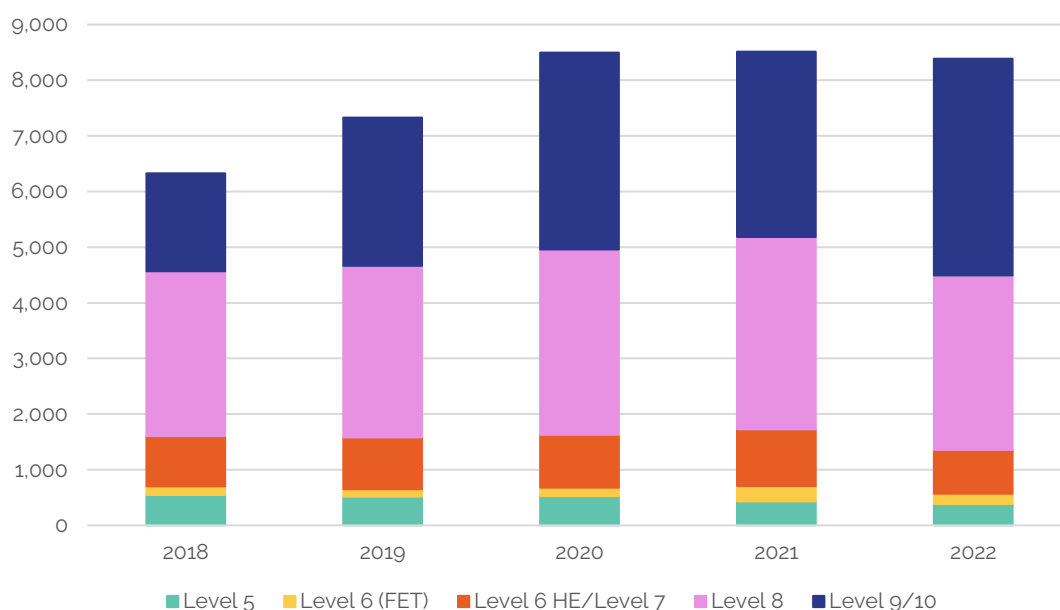
Source: HEA, QQI, SOLAS/ETBI

*\*Higher education (QQ) awards include only major awards those made to learners at private, independent colleges and other non-HEA aided institutions.*

## How does this compare to preceding years<sup>8</sup>?

- Between 2018 and 2022, the total number of ICT awards rose by one third (33%) (Figure 4.2); most of this growth was due to an increase in level 9 major awards, which rose by approximately 2,100 awards over this time.
- Compared to 2018, the number of ICT FET awards appears to have fallen by 130 in 2022.
- Between 2021-22, the total number of ICT awards fell slightly by nearly 130 awards (or 2%), with declines across most NFQ levels with the exception of levels 9/10. It is the first time in this time series that the number of ICT awards have decreased.
- The overall decline between 2021 and 2022 for this field was even stronger (-12%) when non-QQI awards from the FET sector are included mostly due to a strong decrease (1,300 fewer awards) in the number of non-NFQ aligned FET awards (not illustrated in the graph).

Figure 4.2 ICT awards by NFQ level 2018-2022



Source: HEA; QQI

<sup>8</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.



## How do the 2022 awards breakdown by detailed field?

- At 2,820 in 2022, the highest number of ICT awards was for **software development** subjects, with 69% at level 8 or above (Table 4.1); the number of **software development** awards made in HEA-aided higher education grew each year over the period 2018-2021 (over 900 additional awards), an increase of 55%. However, between 2021-22, the number of awards for **software development** fell by 325 (-12%).
- In contrast, between 2021-22, the number of ICT awards made by QQI-HE colleges not funded by the HEA increased by approximately 300 awards. When all **software development** related awards for the entire higher education sector (both private and publicly funded) are added together, it shows an increase between 2018-21 (1,794 and 2,950 awards respectively), with the total remaining fairly stable between 2021-22 (2,999 awards in 2022).
- Between 2021-22, the total number of awards for **computer use** declined across FET and higher education (by approximately 600 awards), while database/network design awards fell slightly (by just over 80 awards).

Within ICT, a number of specific areas of direct relevance to the skills needs of the economy cannot be identified by ISCED sub-fields alone. The following subject areas were identified by course titles and appear in the data across more than one detailed field.

- **Security:** there were approximately 890 security related awards in 2022 (e.g. cyber security, cybercrime etc) in the further and higher education sector.
- **Games:** there were just over 120 awards for games development and animation in higher education; in addition, classified in the arts/humanities field, there were a further 110 FET awards for gaming or animation.
- **Artificial intelligence:** there were nearly 370 awards in higher education in 2022.
- **Data analytics:** there were over 1,200 awards for courses in data analytics and nearly 200 awards in business analytics, with the vast majority made to learners at private independent third level colleges. In addition, there were approximately 280 data analytics awards also captured in the mathematics and statistics field of learning, examined in Section 3.

**Table 4.1 ICT awards by sector, NFQ level and detailed field, 2022**

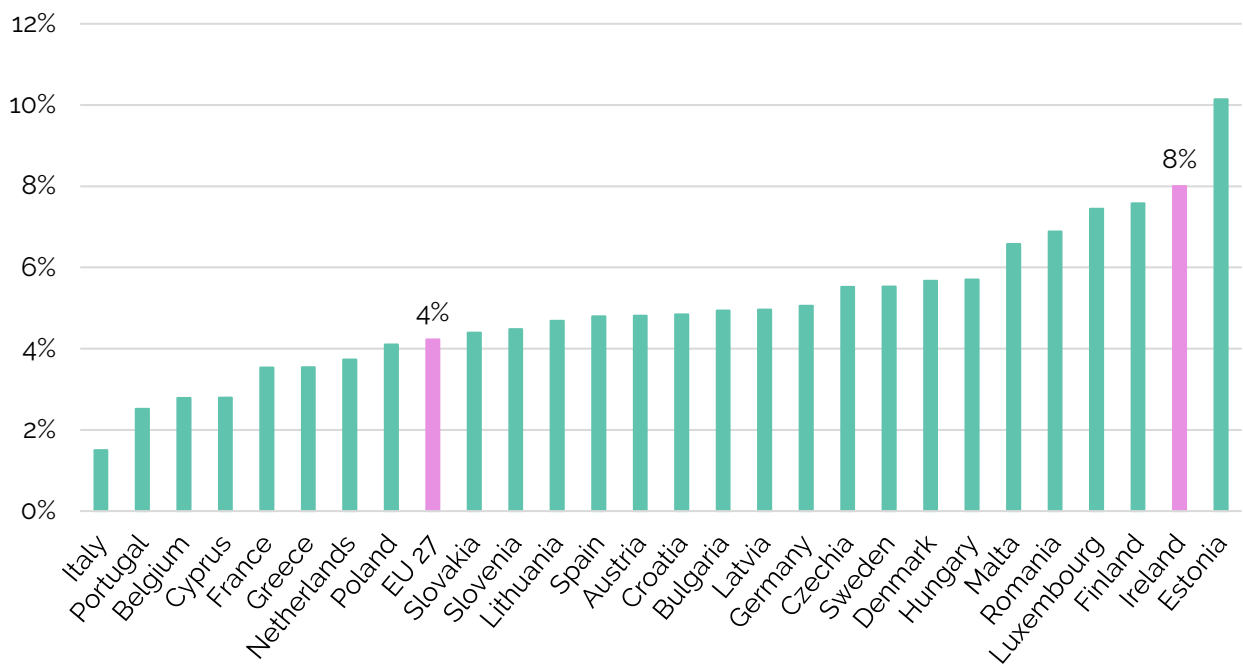
2022 awards	FET				Higher Education			Total
	NFQ 3-4	NFQ 5	NFQ 6	Non-aligned	NFQ 6/7	NFQ 8	NFQ 9/10	
Computer use	27	6		436	41	176	100	<b>786</b>
Database/network design & admin		159	119	1,011	72	164	184	<b>1,709</b>
Software development, etc		226	109	177	355	952	1,001	<b>2,820</b>
Other	44		21	302	194	1,104	1,234	<b>2,899</b>
QQI-HE					127	741	1,373	<b>2,241</b>
<b>Total awards</b>	<b>71</b>	<b>391</b>	<b>249</b>	<b>1,926</b>	<b>789</b>	<b>3,137</b>	<b>3,892</b>	<b>10,455</b>

Source: HEA, QQI, SOLAS/ETBI

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

In 2021, 8% of third level graduates in Ireland had studied ICT related subjects, the second highest share in the EU 27 countries (Figure 4.3). Ireland's share of ICT graduates was twice that of the EU 27 average (4%).

Figure 4.3 ICT graduates as a share of third level graduates in EU 27 countries, 2021



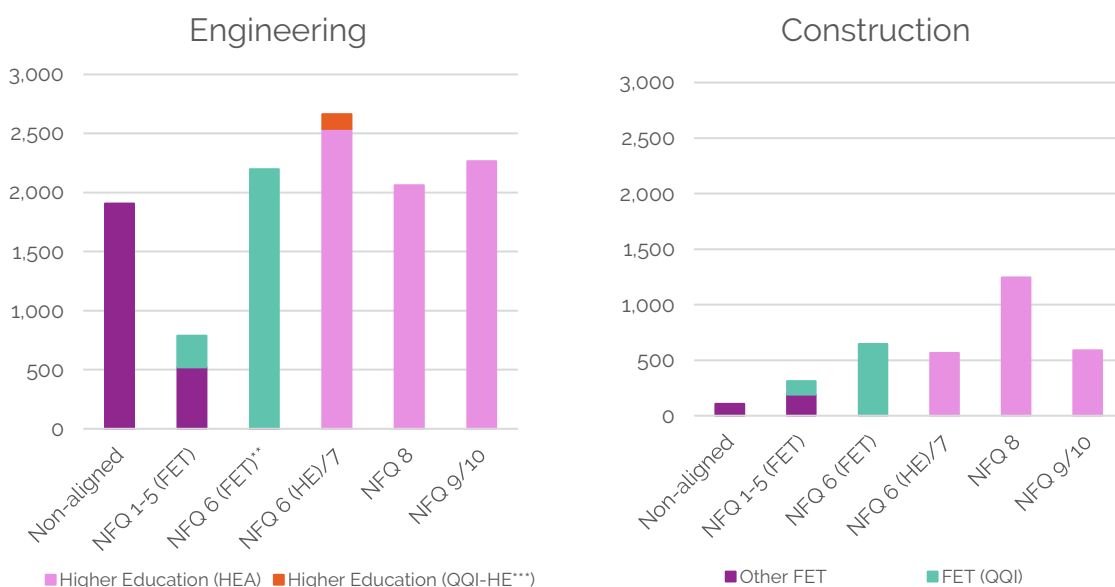
Source: Eurostat (date extracted 17.08.2023)

# 5. Engineering, Manufacturing & Construction Awards

## How many awards were made in the engineering, manufacturing and construction field in 2022?

- There were approximately 15,350 awards in engineering, manufacturing and construction related fields in 2022, with nearly 11,900 in engineering (including manufacturing) and over 3,450 in construction (Figure 5.1).
- This field accounted for 11% of all awards made in 2022.
- At just over 3,300 awards, level 8 accounted for the largest number of awards in this field; nonetheless, in the engineering subfield, level 6/7 awards outnumbered level 8 awards (by approximately 600 awards); level 6/7 awards outnumber level 8 in only one other field (services).
- This field also had the largest number of level 6 FET awards at more than 2,800 (typically in engineering). In fact, engineering, manufacturing and construction accounted for more than one third of all level 6 FET awards made in 2022 (35%), mostly due to the number of qualifying apprentices achieving craft awards (e.g. electrical, carpentry, motor mechanics, plumbing, etc.).

Figure 5.1 Awards in the engineering, manuf. & construction sub-field by NFQ level, 2022\*



Source: HEA, QQI & SOLAS /ETBI

\*Excludes levels where the total number of awards made was five or less.

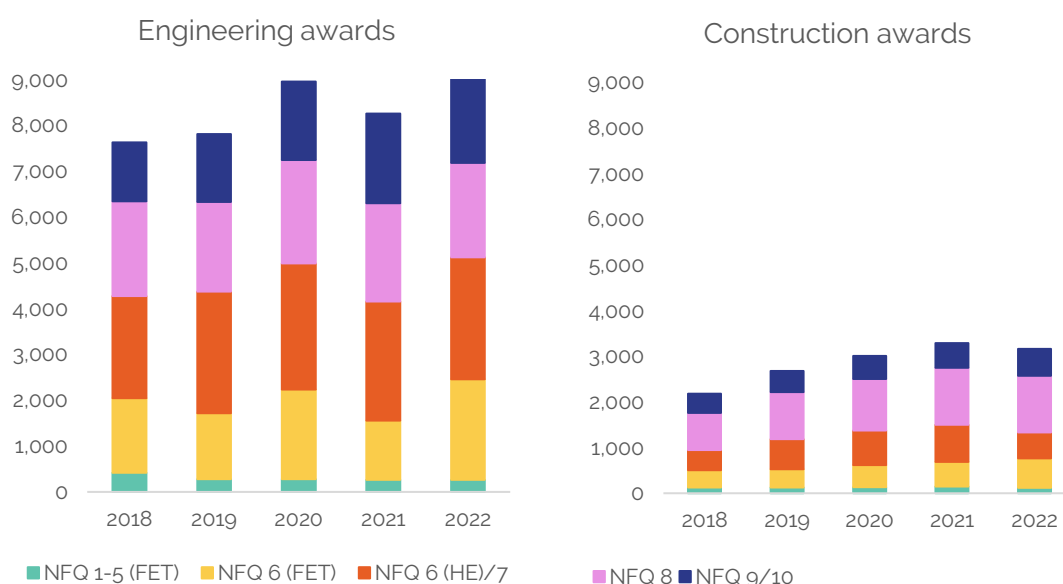
\*\*There were also 6 FET non-QQI awards at NFQ 6 for engineering (not appearing in the chart due to their small number).

\*\*\*Higher education awards include approximately 130 level 7 major awards made by QQI to learners at private, independent colleges and other non-HEA aided institutions.

## How does this compare to preceding years<sup>9</sup>?

- Between 2018 and 2022, the number of engineering, manufacturing and construction awards rose by 29%, representing an additional 2,800 awards (Figure 5.2). This field had the second highest increase in the number of awards over this five-year period after SSBL. Increases at levels 9/10 (1,150 additional awards) and FET level 6 (over 820 additional awards) accounted for 70% of the total rise in awards.
- Compared to 2021, there was a 9% increase in the number of awards in 2022 (an additional 1,070 awards).
- **Engineering/manufacturing sub-field:** between 2021 and 2022, the number of engineering/manufacturing awards rose by 14% (nearly 1,200 additional awards), especially at FET level 6 which saw an increase of 69% (895 additional awards); when the 'Other FET' data is included (not illustrated in the graph), the total increase in all awards amounted to 2,360, or +25%.
- **Construction sub-field:** despite year-on-year growth between 2018 to 2021, the number of construction awards fell by 4% (approximately 120 fewer awards) more recently between 2021-22; the largest decline occurred in levels 6/7 in higher education (-30% or almost 250 fewer awards). In contrast the number of level 6 FET awards rose by 20% (almost 110 more awards) and levels 9/10 (+9% or 50 additional awards) over the year. In addition, the 'Other FET' awards data (not shown in the graph) shows an increase of approximately 160 awards over the same period.

Figure 5.2 Awards in the engineering/manuf. & construction by NFQ level, 2018-2022



Source: HEA, QQI

<sup>9</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

## How do the 2022 awards breakdown by detailed field?

### Engineering/manufacturing:

- Of the 11,900 awards made in engineering and manufacturing related fields, the largest detailed field was **mechanics**, with almost 3,600 awards; three quarters of these were made to learners in the FET sector (approximately 2,750 awards), in particular to those who had taken courses leading to industry certification rather than QQI awards (i.e. within the non-NFQ aligned FET category), almost all of which were for welding and related subjects.
- Combined the **electrical and electronic engineering** sub-fields accounted for over 2,100 (or 18%) of all engineering awards; **electrical** was dominated by craft-electrical awards (FET NFQ level 6), made to 1,087 qualifying apprentices (i.e. electricians), the highest number in several years and more than double that observed in 2021 (when there were 524 qualifying electricians); **electronic engineering** awards were concentrated in the higher education sector at 1,270 awards (accounting for 93%). In addition, a total of 227 higher education awards were related to **automation and/or robotics** in 2022, which were mostly at NFQ level 7 (147 awards).

### Construction:

- **Civil and building engineering** made up just over 1,000 awards at levels 8-10 (nearly 40 more awards than in 2021); and has been steadily increasing in recent years, especially in 2019 when there were an additional 170 awards compared to 2018; over 350 awards were made in higher education for **quantity surveying**, which was similar to that in the previous year 2021 (336 awards), while it had increased since 2020 (274 awards)..
- **Architecture and town planning**: there were over 750 architecture related awards in 2022; of these, 155 awards were made to learners on RIAI accredited programmes<sup>10</sup>, which fell slightly from nearly 170 awards in 2021, but was 44% higher than in 2018 (108 awards). In 2022, there were 114 awards to learners on recognised town planning courses at levels 8 and 9<sup>11</sup>, which increased slightly from 94 awards in the previous year 2021.
- In addition to the construction awards in this field of learning were generic awards made to over 1,000 learners on short Near Zero Energy Building (NZEB) courses (e.g. NZEB fundamental awareness).

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<sup>10</sup> <https://www.riai.ie/careers-in-architecture/education/accredited-programmes>; TU Dublin, UCD, UL, WIT and CIT/UCC

<sup>11</sup> These awards at levels 8 and 9 are accredited by the Irish Planning Institute. See <https://ipi.ie/become-a-planner/accredited-courses/>

**Table 5.1 Engineering/manuf. & construction awards by NFQ level & detailed field, 2022**

2022 awards	FET				Higher Education*				Total
	NFQ 3&4	NFQ 5	NFQ 6	Non-aligned	NFQ 6	NFQ 7*	NFQ 8	NFQ 9/10	
<b>Engineering &amp; manufacturing, inc</b>	<b>385</b>	<b>403</b>	<b>2,199</b>	<b>1,907</b>	<b>642</b>	<b>2,023</b>	<b>2,063</b>	<b>2,266</b>	<b>11,888</b>
<i>Chemical</i>					47	165	113	406	731
<i>Electricity &amp; energy</i>	160	4	1,144	119	48	101	157	106	1,839
<i>Electronic</i>	27		45	23	219	470	363	218	1,365
<i>Mechanics &amp; metal</i>	160	159	796	1,567	25	220	455	217	3,599
<i>Food processing</i>	9	30			80	59	179	143	500
<b>Construction, inc</b>	<b>151</b>	<b>159</b>	<b>647</b>	<b>107</b>	<b>123</b>	<b>442</b>	<b>1,245</b>	<b>589</b>	<b>3,463</b>
<i>Architecture etc</i>	63	39		43		10	371	230	756
<i>Civil &amp; building eng.</i>	88		355	64	84	387	738	265	1,981
<b>Total awards</b>	<b>536</b>	<b>562</b>	<b>2,846</b>	<b>2,014</b>	<b>765</b>	<b>2,465</b>	<b>3,308</b>	<b>2,855</b>	<b>15,351</b>

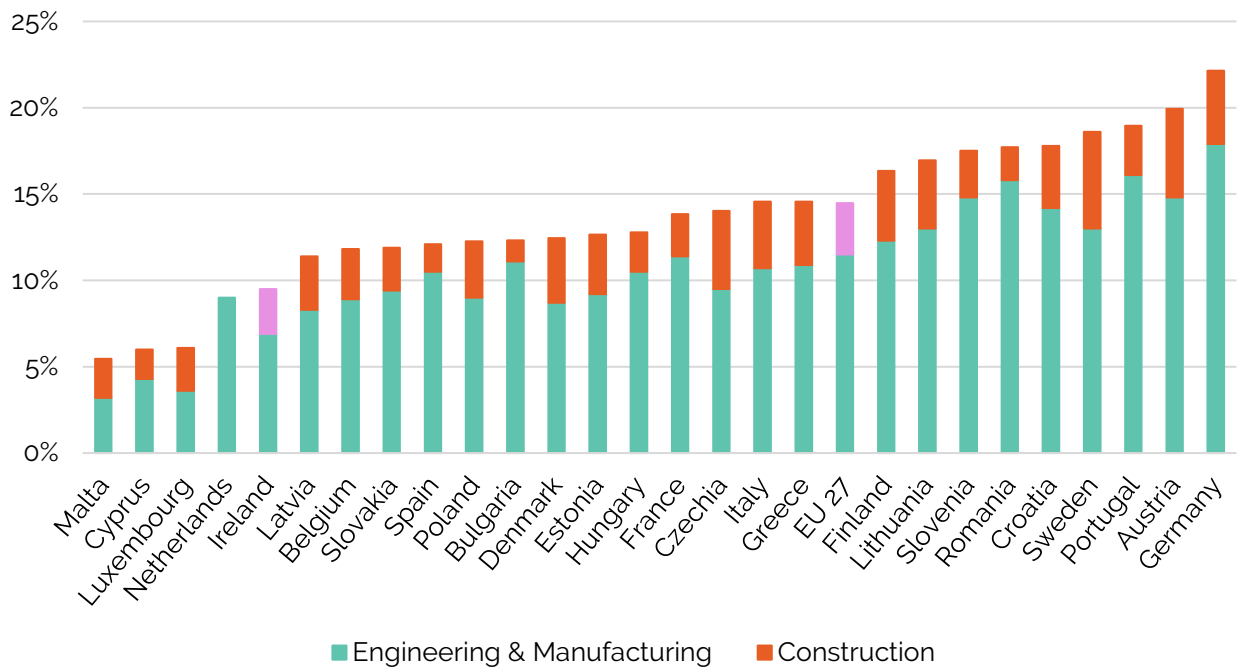
Source: HEA, QQI, SOLAS/ETBI

\*Includes 126 QQI-HE (private) awards in Engineering at level 7

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

In 2021, the share of third level graduates who had studied engineering, manufacturing or construction related subjects in Ireland was 10%, which was below the EU 27 average of 15% (Figure 5.3). The comparatively low share of graduates in this field was due to lower than average shares for engineering and manufacturing fields (7% for Ireland, compared to 12% for the EU 27); the share of construction related graduates, at 3% in contrast, was almost on a par with the EU 27 average.

Figure 5.3 Engineering & construction graduates as a share of third level graduates, 2021



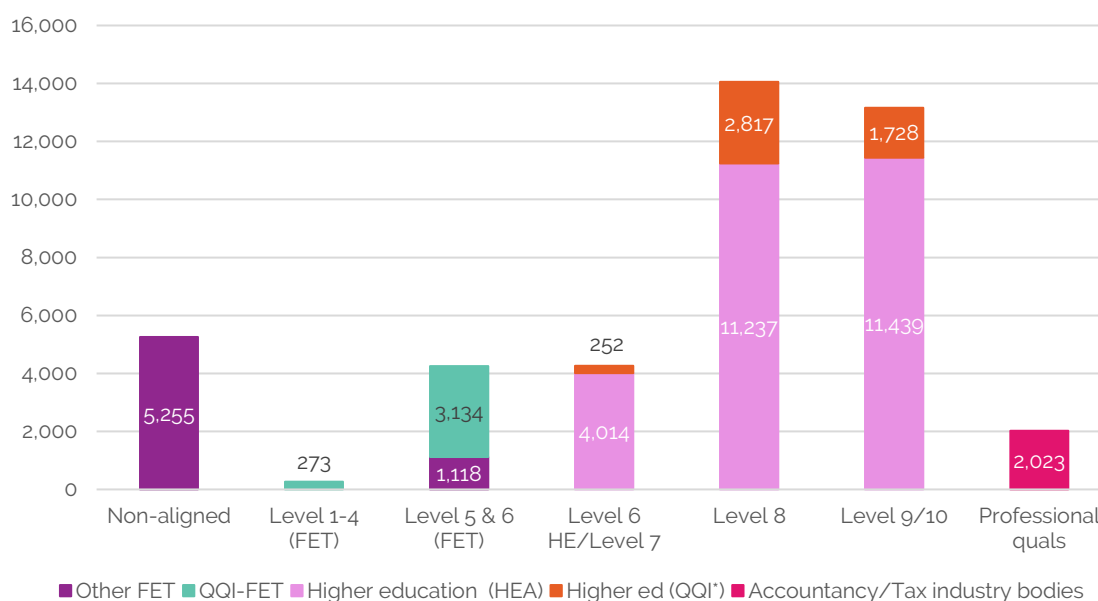
Source: Eurostat (date extracted 17.08.2023)

## 6. Social Science, Business & Law Awards

### How many awards were made in the SSBL field in 2022?

- There were nearly 43,300 awards in social science, business and law (SSBL) related subjects in 2022 (Figure 6.1).
- This field is the largest field in terms of the number of awards made, making up 31% of all awards in 2022.
- Almost two thirds (63%) were made at level 8 or above (more than 27,200 awards).
- With almost 4,800 QQI-HE awards in 2022, private, independent third level colleges made up just over one tenth of all awards in this field.
- Nearly one quarter of SSBL awards (23%) were in the FET sector, making up nearly 9,800<sup>12</sup>.
- Approximately 2,000 individuals obtained qualifications through professional bodies (i.e. accountancy and tax qualifications).

**Figure 6.1 Social science, business & law awards by NFQ level and sector, 2022\***



Source: HEA, QQI, SOLAS/ETBI, IAASA, Irish Tax Institute

\*Higher ed (QQI-HE) awards include only major awards made to learners at private, independent colleges and other non-HEA aided institutions.

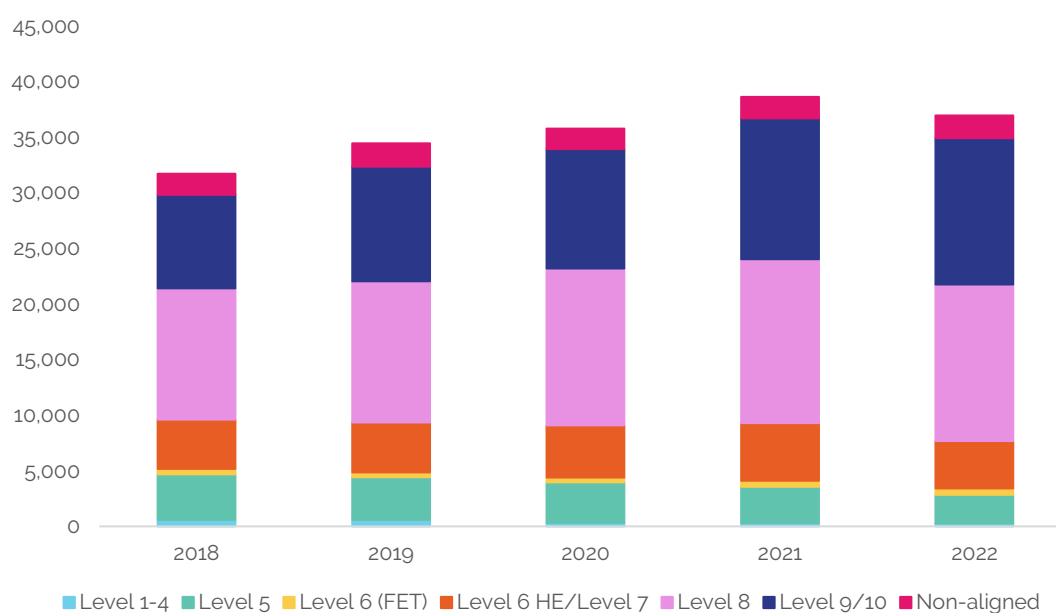
<sup>12</sup> The Other FET sector includes approximately 2,900 learners on programmes leading to ECDL and basic MS Office certification; awards made to these learners are categorised in the SOLAS/ETBI PLSS as ICT awards in line with the ISCED field of learning classification. However, for the purposes of this report, these awards have been reclassified to include them in the SSBL broad field and the 'secretarial and office work' detailed field. This prevents a situation where these 2,900 awards may otherwise be counted as potential skills for ICT related occupations.



## How does this compare to preceding years<sup>13</sup>?

- Between 2018 and 2022, the number of SSBL awards grew strongly by 16% (just over 5,200 additional awards), as shown in Figure 6.2.
- The number of SSBL awards fell by 4% between 2021 and 2022 (nearly 1,700 fewer awards), with the largest decline in level 6/7 higher education awards (more than 900 fewer awards).
- Despite the overall decline in the number of SSBL awards between 2021-22, there were slight increases in those at level 9/10 (just over 500 additional awards) and professional awards (100 additional awards).
- In 2022, the number of FET-QQI awards declined by 1,750 when compared to 2018, with a fall observed across each NFQ level (or group of levels) except level 6 (100 more awards); FET-QQI awards also fell between 2021 and 2022 (except for level 6), albeit by a smaller amount (almost 700 fewer awards); this downward trend holds even when PLSS data is included, the total number of FET awards (QQI plus non-QQI) was nearly 1,800 lower in 2022 than in 2021, a fall of 15%.
- The number of learners gaining qualifications from professional bodies (accountancy and taxation) increased by 5% (or just over 100 individuals) in 2022 compared to 2021 (non-aligned category in Figure 6.2).

Figure 6.2 Social science, business & law (SSBL) awards by NFQ level 2018-2022



Source: HEA, QQI

<sup>13</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

## How do the 2022 awards breakdown by detailed field?

- With over 9,600 awards, **management and administration** was the largest detailed field, accounting for 22% of the total SSBL awards. Most were in the higher education sector (81%), particularly at postgraduate level (NFQ 9).
- **Secretarial and office work** awards made up just over 4,100 awards and were made almost exclusively in the FET sector; approximately 1,100 of these awards were made in business or office administration (NFQ 5 and 6), with most of the remainder being for digital skills (e.g. text processing) made in the non-aligned FET category.
- **Accounting/tax** related awards made up more than 3,050 awards, with a further 2,023 qualifiers through professional bodies, to give a total of nearly 5,080 awards in 2022; in addition, there were approximately 900 awards, categorised within the broader business, administration and law field, made to learners who had studied for honours bachelor degrees in commerce (e.g. BComm and BComm international qualifications), although not all BComm graduates go on to train as accountants.
- There were approximately 500 awards in **economics** (all from the higher education sector); however, as many learners opt to study economics as part of an arts degree (and therefore not captured in this field of learning), this number is likely to be the minimum number of awards for economics.
- SSBL had the highest number of learners achieving awards that were neither on nor aligned to the NFQ at just over 5,250, which represented 12% of all SSBL awards.

**Table 6.1 Social science, business and law awards by NFQ level and detailed field, 2022**

2022 awards	FET				Higher Education*				Prof. bodies	Total
	NFQ 1-4	NFQ 5	NFQ 6	Non-aligned	NFQ 6	NFQ 7	NFQ 8	NFQ 9/10		
<b>Social sciences &amp; journalism, inc</b>		<b>727</b>	<b>9</b>		<b>106</b>	<b>327</b>	<b>2,700</b>	<b>2,547</b>		<b>6,416</b>
<i>Economics</i>					*	*	256	249		508
<i>Psychology</i>					43	111	699	709		1,562
<b>Business, admin &amp; law</b>	<b>273</b>	<b>2,114</b>	<b>1,402</b>	<b>5,255</b>	<b>1,634</b>	<b>1,947</b>	<b>8,537</b>	<b>8,892</b>		<b>30,054</b>
<i>Accounting &amp; tax</i>		19	559	927	162	167	665	558		3,057
<i>Finance</i>		16		73		11	331	782		1,213
<i>Management &amp; admin</i>		229	565	1,060	615	1,066	2,085	4,017		9,637
<i>Marketing</i>		76		316	100	176	763	1,002		2,433
<i>Secretarial**</i>	188	1,013	58	2,877	*					4,126
<i>Sales</i>	85	31	119		70	54	69	93		521
<i>Law</i>					12	53	1,430	832		2,327
<b>QQI -HE awards</b>					<b>35</b>	<b>217</b>	<b>2,817</b>	<b>1,728</b>		<b>4,797</b>
<i>Social sciences, &amp; journalism</i>							250	181		439
<i>Business &amp; admin</i>					34	210	2,567	1,547		4,358
<b>Professional (accounting + tax)</b>									<b>2,023</b>	<b>2,023</b>
<b>Total awards</b>	<b>273</b>	<b>2,841</b>	<b>1,411</b>	<b>5,255</b>	<b>1,775</b>	<b>2,491</b>	<b>14,054</b>	<b>13,167</b>	<b>2,023</b>	<b>43,290</b>

Source: HEA, QQI, SOLAS/ETBI, IAASA and Irish Tax Institute

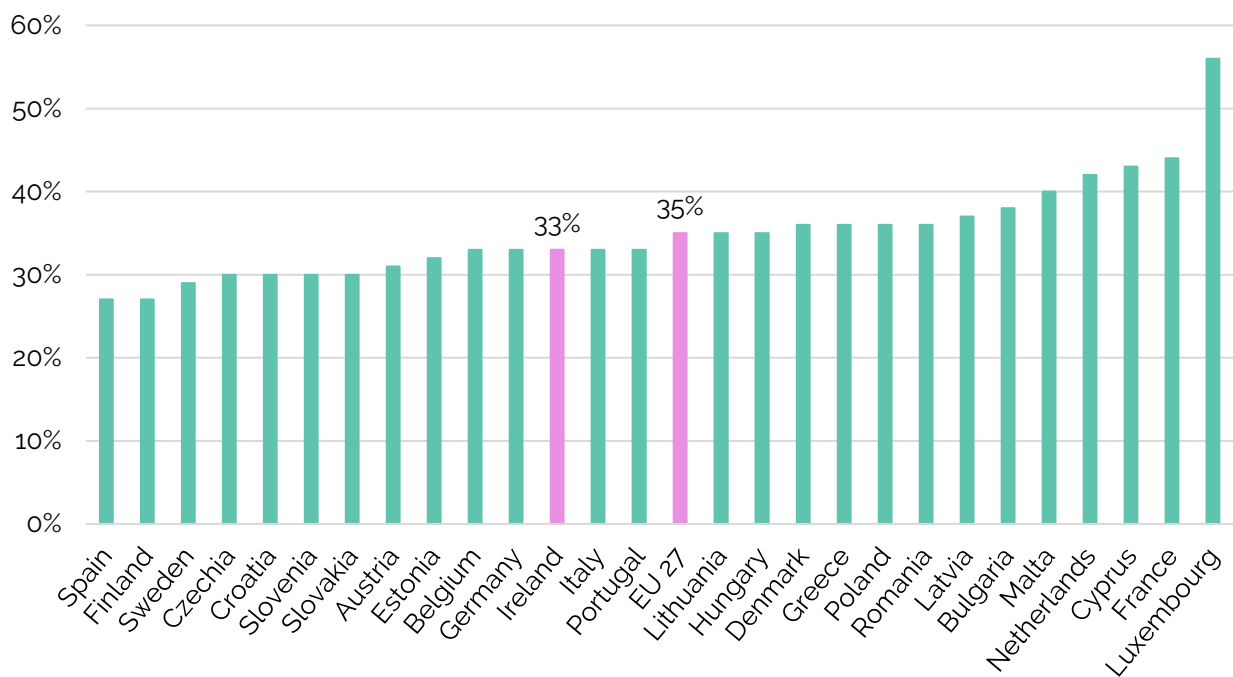
\*The number of HEA awards was less than 10 and has been suppressed for confidentiality reasons.

\*\*Includes approximately 2,900 learners from the ICT field, which were recategorized for the purposes of this report in the SSBL field (Secretarial and office work) to avoid overestimating the potential supply of skills to ICT occupations.

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

In the year 2021, the total share of social science, business and law graduates in Ireland was 33%, only marginally lower than the EU 27 average of 35% (Figure 6.3). Out of the 27 EU countries, Ireland was ranked in 16<sup>th</sup> position, with 15 countries having a higher share of SSBL graduates amongst all third level graduates.

Figure 6.3 SSBL graduates as a share of third level graduates, 2021



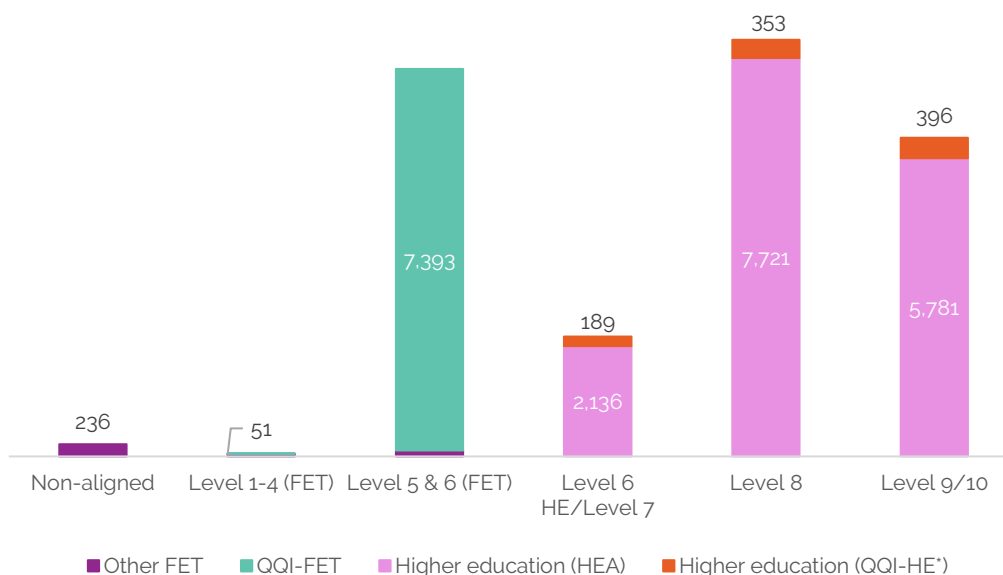
Source: Eurostat (date extracted 17.08.2023)

## 7. Health and Welfare Awards

### How many awards were made in the health & welfare field in 2022?

- There were 24,400 awards in health and welfare subjects in 2022 (Figure 7.1).
- With 17% of total awards in 2022, the health and welfare field was the second largest field in terms of numbers of awards made; only social science, business and law had a higher share at 31%.
- In 2022, the highest number of awards in this field, at nearly 8,100, was at level 8 (e.g. nursing, medical or therapy programmes), followed by levels 5/6 further education awards at almost 7,500 (e.g. childcare, healthcare support, and nursing studies).
- Of the postgraduate awards (typically NFQ 9/10), almost 280 were for PhDs.
- Almost all awards in this field were either on or aligned with the NFQ; most FET awards were made by QQI-FET, although just over 400 were made by other awarding bodies (e.g. PHECC emergency Medical Technician, RSA Approved Driving Instructor and BTEC Health and social care award) and were aligned to the NFQ via other National Qualification Frameworks<sup>14</sup>.

Figure 7.1 Awards in health and welfare, by NFQ level, 2022



Source: HEA, QQI-FET, QQI-HE & SOLAS/ETBI

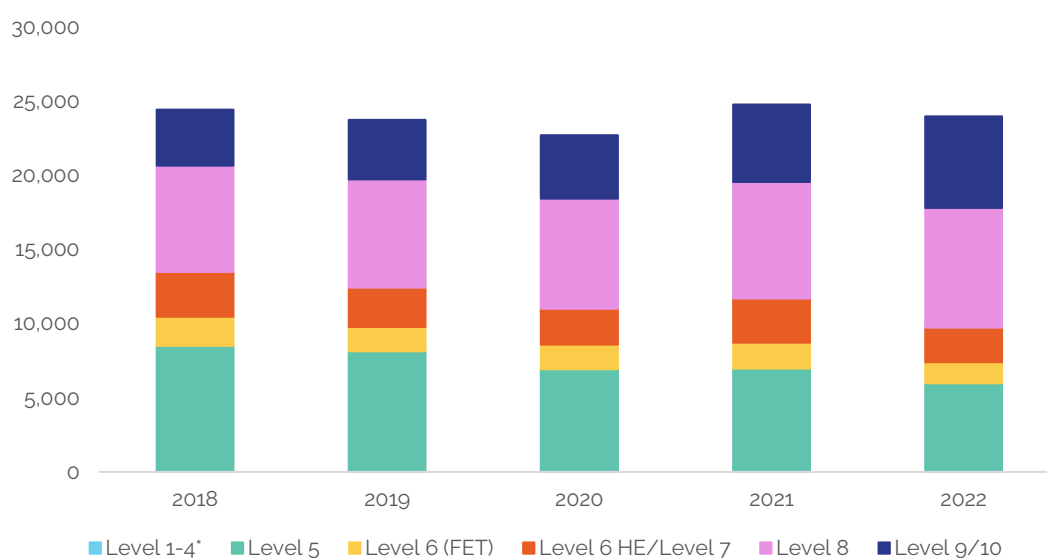
*\*Higher ed (QQI-HE) awards include only major awards made to learners at private, independent colleges and other non-HEA aided institutions.*

<sup>14</sup> [https://www.qqi.ie/sites/default/files/2023-08/Qualifications%20Can%20Cross%20Boundaries-Aug-2023\\_0.pdf](https://www.qqi.ie/sites/default/files/2023-08/Qualifications%20Can%20Cross%20Boundaries-Aug-2023_0.pdf)

## How does this compare to preceding years<sup>15</sup>?

- Between 2018 and 2022, the number of health and welfare awards fell slightly by 2% (nearly 450 fewer awards) (Figure 7.2).
- Similarly, there was a decrease of 3% (approximately 800 awards) in 2022 compared to 2021.
- The year-on-year decline between 2021 and 2022 was due largely to falls in both the FET sector (mainly level 5 and level 6) and the higher education sector (level 6/7); in FET, the largest falls were for the Early Childhood Care and Education award title (nearly 1,000 fewer awards).
- In contrast, between 2021 and 2022, there were increases at levels 9/10 (+18% or approximately 950 additional awards, typically in nursing and medicine related postgraduate studies) and level 8 (+3% or 200 more awards).
- Between 2021 to 2022, the number of awards made to learners at private, independent, third level colleges increased by almost 200 awards; much of the growth related to counselling and psychotherapy awards (145 additional awards), although there was also a rise in the number of postgraduate awards in pharmaceutical business-related areas, which reached more than 230 awards in 2022 (140 additional awards compared to 2021).

Figure 7.2 Health and welfare awards by NFQ level 2018-2022



Source: HEA; QQI-FET & QQI-HE

\*Awards at levels 1-4 amounted to fewer than 50 in each year.

<sup>15</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

## How do the 2022 awards breakdown by detailed field?

In terms of the breakdown of health and welfare awards in this broad field, just over half (54%) were for health related studies (e.g. medical and nursing) and 46% for welfare related subjects (e.g. social work, childcare etc).<sup>16</sup>

**Nursing & caring:** the majority of awards in nursing and caring (85%) were made in the higher education sector, while 15% were in the FET sector; nearly one half of all nursing and caring awards (44%) were made at level 8 (just over 2,500), the minimum level requirement for entry to nursing occupations; a further 880 awards were made at level 5; captured in a separate detailed field of learning (welfare) were over nearly 2,300 awards in healthcare support.

**Childcare and youth work:** this detailed field includes awards made to those working (or intending to work) in early years education, among others; at levels 5 and 6, there were nearly 2,700 awards in the FET sector and almost 1,700 further awards in the higher education sector, giving a total of nearly 4,400 awards in 2022, which represented almost 750 fewer awards compared to 2021.

Of note, under a separate field of learning (Education awards – examined in Section 10 of this report), there were approximately 520 level 7 and level 8 awards in early childhood care and education, as well as over 540 level 6 awards for leadership/inclusion in early years settings. This brings the total number of early childhood care and education related awards at levels 5-9 across the two broad fields of learning to almost 5,500.

**Table 7.1 Health and welfare awards by NFQ level and detailed field, 2022**

2022 awards	FET				Higher Education				Total
	NFQ 1-4	NFQ 5	NFQ 6	Non-aligned	NFQ 6	NFQ 7	NFQ 8	NFQ 9/10	
<b>Health, including</b>	<b>44</b>	<b>921</b>	<b>58</b>	<b>236</b>	<b>448</b>	<b>281</b>	<b>5,775</b>	<b>5,257</b>	<b>13,020</b>
Medicine						43	1,336	923	2,302
Nursing & caring		879			38	38	2,507	2,236	5,698
Dental studies					38	56	98	16	208
Pharmacy		41			141	45	242	277	746
<b>Welfare, including</b>	<b>15</b>	<b>5,091</b>	<b>1,440</b>		<b>450</b>	<b>957</b>	<b>1,946</b>	<b>524</b>	<b>10,423</b>
Childcare & youth	8	1,457	1,198		256	514	821	108	4,362
Social work etc.					151	353	1,084	359	1,947
<b>QQI-HE</b>					<b>13</b>	<b>176</b>	<b>353</b>	<b>396</b>	<b>938</b>
<b>Total awards</b>	<b>59</b>	<b>6,012</b>	<b>1,498</b>	<b>236</b>	<b>911</b>	<b>1,414</b>	<b>8,074</b>	<b>6,177</b>	<b>24,381</b>

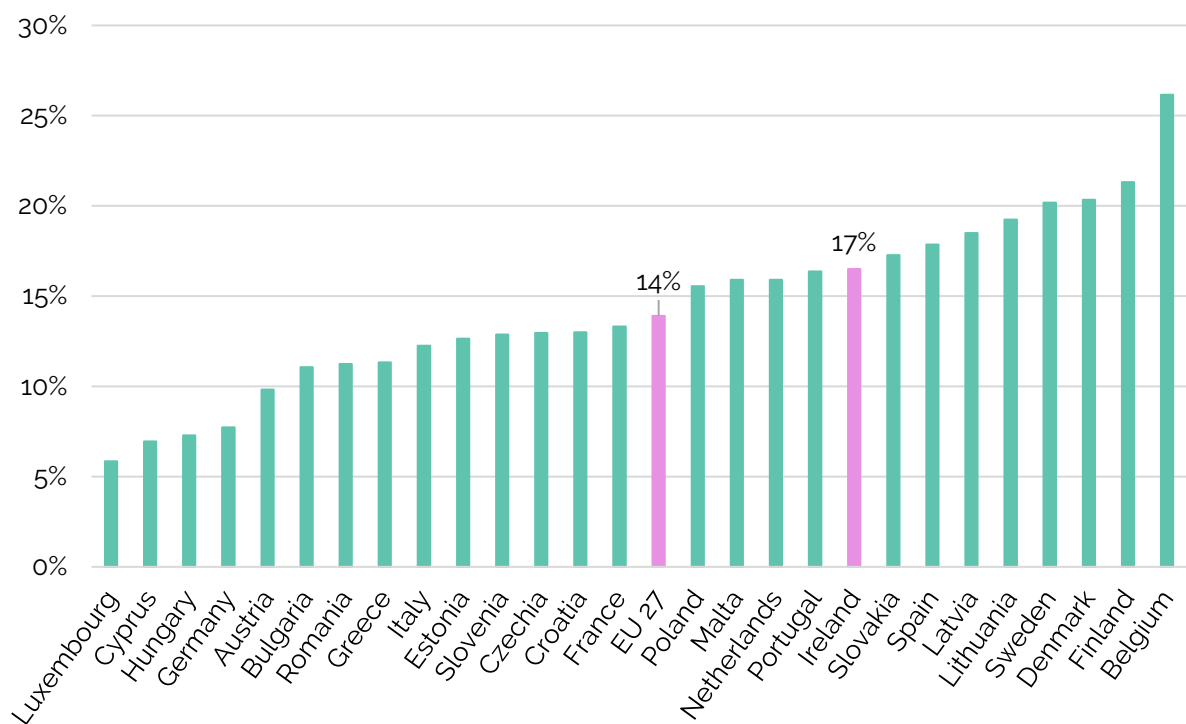
Source: HEA, QQI, SOLAS/ETBI

<sup>16</sup> This breakdown includes the awards made by private and independent colleges in the higher education sector (QQI-HE) which are not itemised by detailed field in Table 7.1.

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

Ireland's share of third level graduates who had studied health/welfare programmes was higher than the EU average, at 17% and 14% respectively, driven mainly by higher shares in nursing and in welfare; Ireland's share of medical graduates was below the EU average. Out of the 27 EU countries, Ireland was ranked in 9<sup>th</sup> position, with 8 countries having a higher share of health graduates amongst all third level graduates in 2021.

Figure 7.3 Health and welfare graduates as a share of third level graduates, 2021



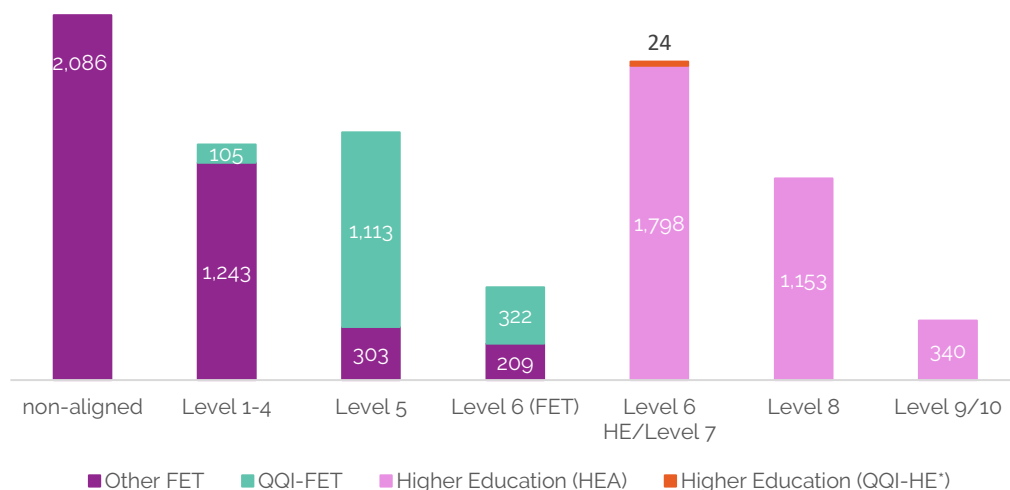
Source: Eurostat (date extracted 17.08.2023)

## 8. Services Awards

### How many awards were made in the services field in 2022?

- There were almost 8,700 awards in services related subjects in 2022, making up 6% of the total in FET and higher education (Figure 8.1).
- The FET sector accounted for more than half (62%) of services awards; only the agriculture/vet and generic programmes fields had a higher share of FET awards.
- There were nearly 2,100 awards that were neither on nor aligned to the NFQ; these were typically made by industry bodies (e.g. Road Safety Authority, Pre-Hospital Emergency Care Council, Environmental Health Association of Ireland etc).
- With more than 1,800 awards, level 6/7 higher education had the largest number of NFQ aligned awards. This was followed by over 1,400 at level 5; these include awards made by QQI and a small number made by other awarding bodies whose qualifications are aligned to the UK's National Qualification's Framework<sup>17</sup>. These awarding bodies include City and Guilds and CIBTAC, among others.
- The services field was the only field (excluding generic) where level 6/7 higher awards outnumbered level 8 awards; level 6/7 awards made up 21% of all awards.

Figure 8.1 Awards in the services field of learning NFQ level 2022\*



Source: HEA, QQI-FET, QQI-HE & SOLAS/ETBI

\*Higher ed (QQI-HE) awards include only major awards made to learners at private, independent colleges and other non-HEA aided institutions.

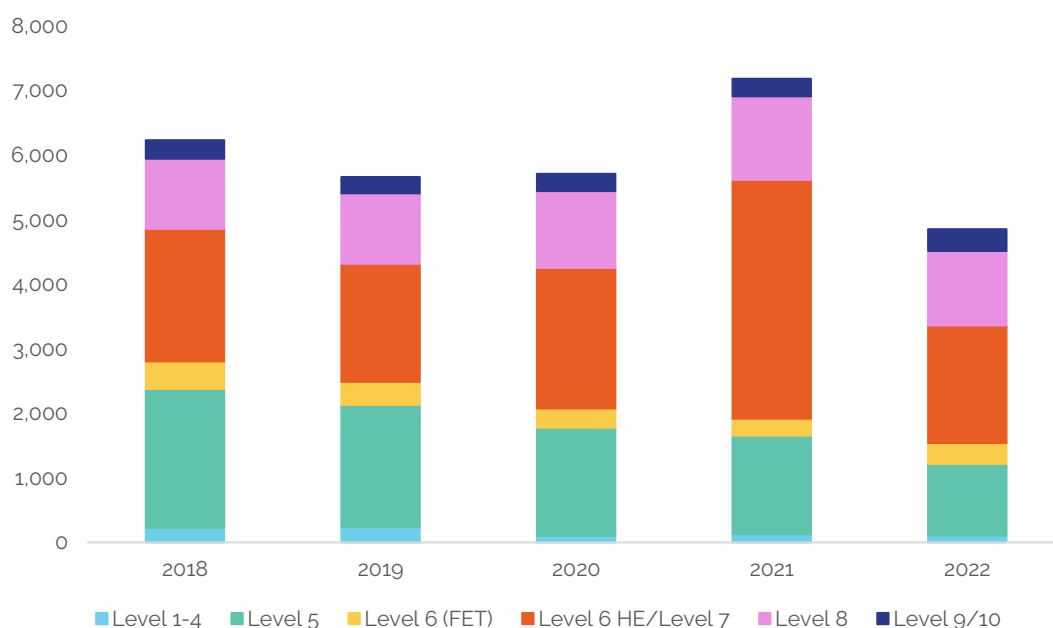
<sup>17</sup> SOLAS assigned an NFQ level to non-QQI awards, based on the document 'Qualifications Can Cross Boundaries' (see link in footnote 14 above).



## How does this compare to preceding years<sup>18</sup>?

- Between 2018 and 2022, the number of services awards fell by 22% (or nearly 1,380 fewer awards), the largest decrease, in absolute terms, observed across all fields of learning (Figure 8.2).
- Much of the decline observed between 2018 and 2022 was due to a fall in the number of awards at NFQ level 5 (-48% or over 1,000 awards); the falls were most notable for hair/beauty, sports and tourism related awards.
- Between 2021 and 2022, the number of services awards declined by 32% (over 2,300 fewer awards), the lowest number of awards over the five-year period. This decrease followed an earlier rise between 2020-21 (+26% or almost 1,500 additional awards). The largest was for level 6/7 awards (-51% or nearly 1,900 fewer awards); mainly due to a decline in customs clearance and compliance awards, which had initially increased following Brexit.
- Not included in Figure 8.2 are approximately 2,100 'Other FET' awards (i.e. non-QQI-FET awards) in 2022, which increased by nearly 700 awards compared to one year earlier: most of this increase was accounted for by a rise in awards for transport services (+625 awards).

Figure 8.2 Services awards by NFQ level 2018-2022



Source: HEA; QQI-FET & QQI-HE

<sup>18</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

## How do the 2022 awards breakdown by detailed field?

In terms of detailed fields, hotel & catering, followed closely by sports, had the largest number of awards at approximately 2,200 and 1,600 respectively; combined these two detailed fields made up 43% of all services awards in 2022. In addition, transport services was the third highest detailed field, accounting for just over 1,500 awards,

- One half of **sports** awards (50%) were made in the FET sector (mostly at level 5).
- **Hotel & catering** awards were less evenly distributed between the FET (68%) and higher education (32%) sectors;
  - within higher education just under half (49%) of all hotel & catering awards in 2022 were for culinary related programmes (total of nearly 350 awards),
  - in addition, there were 280 FET (QQI and Other FET) awards (levels 4, 5 and 6) in culinary/professional cookery related areas,
  - almost all level 1-4 FET awards were at level 4, the majority of which (83%) were for barista or bar service skills.
- **Transport services**: of the non-NFQ aligned FET awards made in this detailed field, over 650 were for driving skills (e.g. HGV, delivery driver) and a further 300 were for forklift operations.
- **Occupational health and safety** awards in the FET sector related primarily to learners on First Aid Responder courses.
- **Security services**: the majority of awards in this field were from the higher education sector; the number of level 6 higher education awards fell from approximately 2,200 in 2021 to 530 in 2022; this is largely attributed to a decrease of over 1,000 awards for customs clearance in 2022.

**Table 8.1 Services awards by NFQ level and detailed field, 2022**

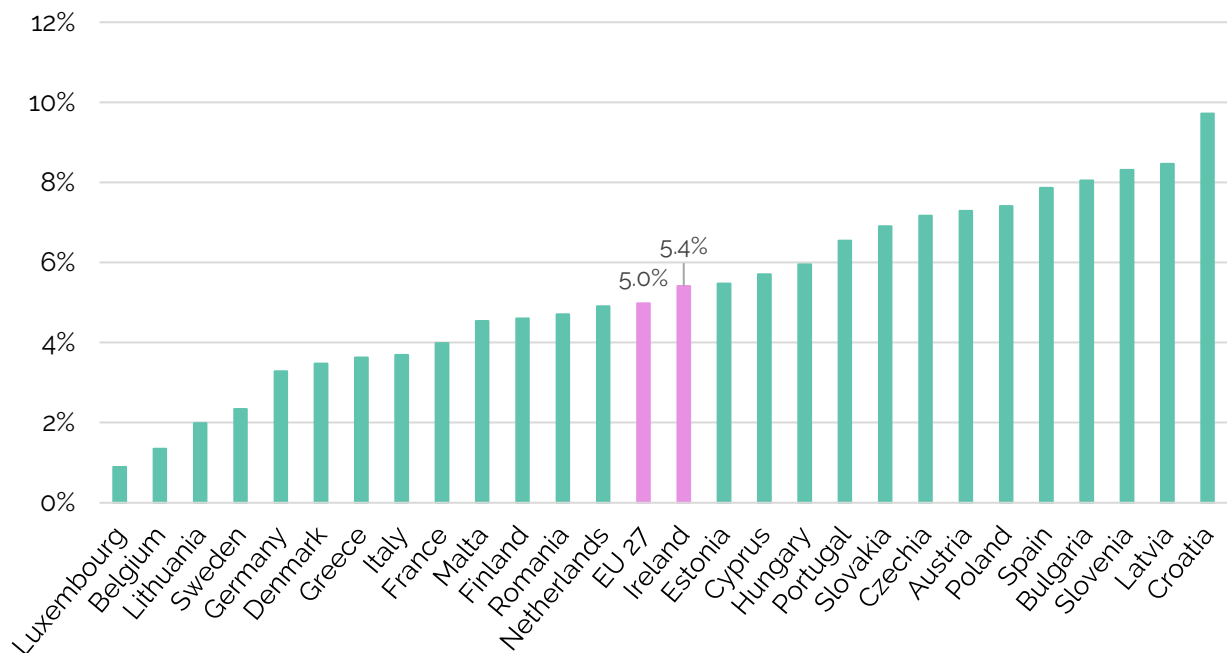
2022 awards	FET				Higher Education				Total
	NFQ 1-4	NFQ 5	NFQ 6 (FET)	Non-aligned	NFQ 6	NFQ 7	NFQ 8	NFQ 9/10	
<b>Personal services, inc</b>	<b>1,348</b>	<b>1,350</b>	<b>504</b>	<b>456</b>	<b>300</b>	<b>552</b>	<b>928</b>	<b>186</b>	<b>5,624</b>
<i>Hair &amp; beauty</i>	368	553	205	101					1,228
<i>Hotel, rest &amp; catering</i>	920	160	108	285	242	209	205	44	2,173
<i>Sports</i>	60	516	154	47	30	229	439	88	1,563
<i>Travel, tourism, leisure</i>		121	19	14	27	114	284	53	632
<b>Transport services</b>		<b>11</b>	<b>17</b>	<b>1,365</b>	<b>10</b>	<b>61</b>	<b>54</b>		<b>1,518</b>
<b>Security services</b>		<b>47</b>	<b>10</b>		<b>530</b>	<b>211</b>	<b>32</b>	<b>31</b>	<b>861</b>
<b>Occupational health &amp; safety</b>		<b>8</b>		<b>265</b>	<b>19</b>	<b>115</b>	<b>139</b>	<b>123</b>	<b>669</b>
<b>QQI-HE</b>					<b>5</b>	<b>19</b>			<b>24</b>
<b>Total awards</b>	<b>1,348</b>	<b>1,416</b>	<b>531</b>	<b>2,086</b>	<b>864</b>	<b>958</b>	<b>1,153</b>	<b>340</b>	<b>8,696</b>

Source: HEA, QQI, SOLAS/ETBI

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

At 5.4%, the share of third level graduates in Ireland who had studied services-related subjects is similar to the EU 27 average (5%) – see Figure 8.3. While Ireland had the third highest share of hotel & catering graduates (1%) amongst all EU 27 countries (1.1% in Finland and Malta)<sup>19</sup>, its share in other detailed fields (e.g. sports, travel & tourism, transport services) was lower than the EU 27 average. Out of the 27 EU countries, Ireland was in 14<sup>th</sup> position in 2021, which was an improvement on its 16<sup>th</sup> place ranking in the previous year 2020.

**Figure 8.3 Services graduates as a share of third level graduates, 2021**



Source: Eurostat (date extracted 17.08.2023)

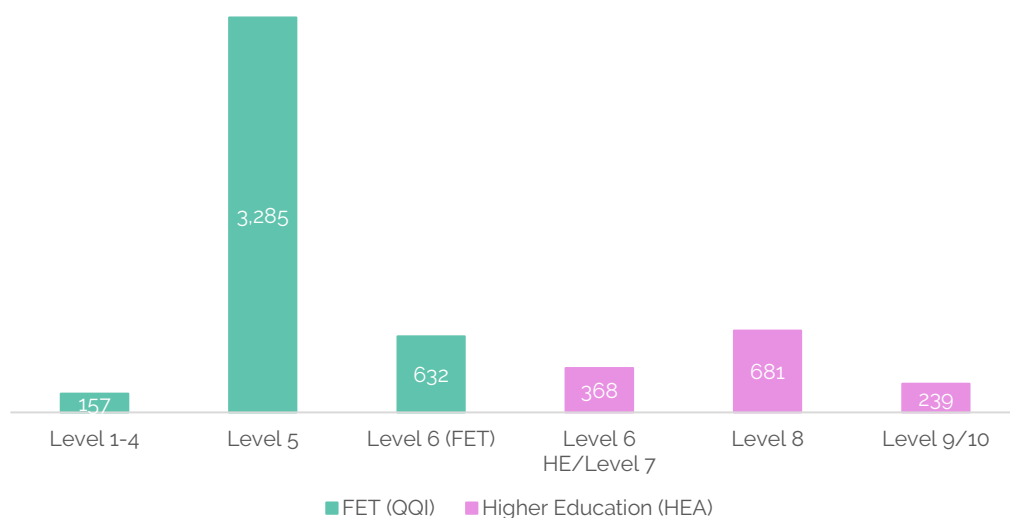
<sup>19</sup> At 0.9%, Ireland's share of hotel and catering graduates was the same as in Cyprus and Portugal.

## 9. Agriculture & Vet Awards

### How many awards were made in agriculture and vet in 2022?

- There were almost 5,400 awards in agriculture/vet related subjects in 2022 (Figure 9.1).
- This field made up just 4% of all awards made in 2022, the second smallest field of learning in terms of awards (after generic programmes).
- As in previous years, the majority of FET awards in this field (just over 2,500 awards, or 62%) were made to learners at TEAGASC centres, rather than those at Education and Training Boards (ETBs); this was the only field of learning where ETBs are not the primary education training provider of FET awards.
- Agriculture/vet awards are concentrated in the FET sector, which accounted for 76% of all awards in this field in 2022; only the generic programmes field had a higher share in FET (at 85%).

Figure 9.1 Agriculture & vet awards by NFQ level, 2022\*



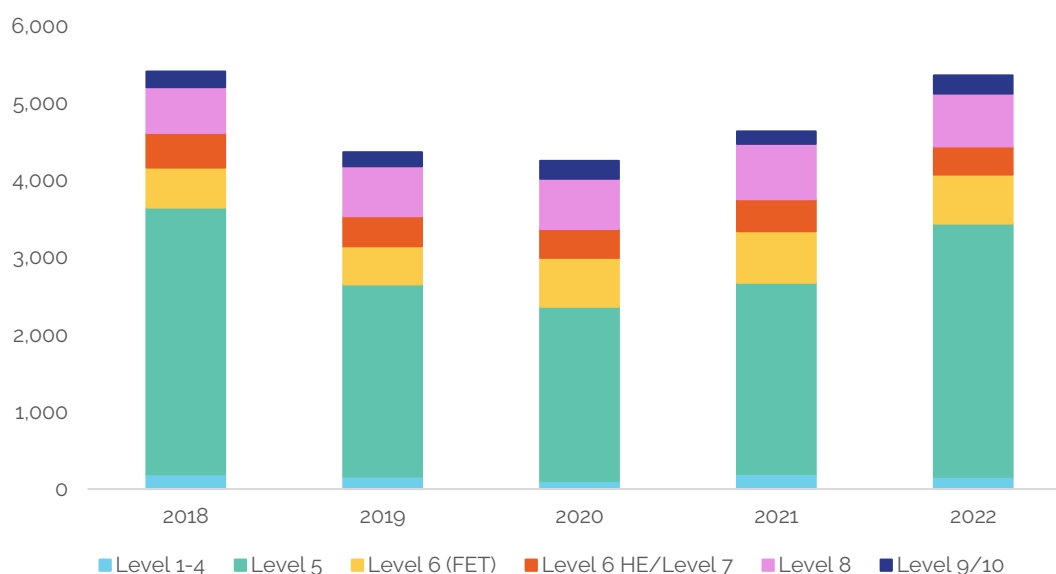
Source: HEA, QQI-FET, QQI-HE

\*Excludes a small number (<10) FET awards in the 'Other FET' category

## How does this compare to preceding years<sup>20</sup>?

- Between 2018 and 2022, the number of agriculture and vet awards fell slightly by 1% (almost 50 awards), with the largest decline at NFQ level 5 (Figure 9.2).
- In contrast, over the period 2021-2022, there was an increase of 16% (just over 700 awards), with FET-QQI level 5 awards increasing by 33% (800 extra awards) and level 9/10 awards going up by 47% (nearly 80 awards). The total number of agriculture and vet awards has been increasing since 2020.

Figure 9.2. Agriculture and veterinary awards by NFQ level 2018-2022



Source: HEA, QQI-FET, QQI-HE

## How do the 2022 awards breakdown by detailed field?

Almost three quarters of all awards made in this field (73%) were for **agriculture** related studies (3,900 awards); of these almost eight out of ten (79%) were made in the FET sector. Many of these FET awards are likely to be related to the requirements for Government (Department of Agriculture, Food and the Marine) payments, such as the Young Farmers Scheme, where farmers may receive a payment, provided they meet certain conditions, including holding an education qualification in agriculture.

**Veterinary** awards in the FET sector related mostly to animal care/science. In higher education, awards were mostly for veterinary medicine or veterinary nursing.

<sup>20</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

Within the **horticulture and forestry** field, the vast majority of awards (499) were for horticulture related studies, 440 of which were made in the FET sector; forestry awards totalled 35 awards (FET & HE).

**Table 9.1 Agriculture/Vet awards by NQF level and detailed field, 2022**

2022 awards	FET			Higher Education			Total
	NQF 1-4	NQF 5	NQF 6 (FET)	NQF 6/7	NQF 8	NQF 9/10	
Agriculture		2,571	506	223	450	153	<b>3,903</b>
Horticulture & forestry	135	239	82	48	30		<b>534</b>
Veterinary	22	475	44	97	204	83	<b>925</b>
<b>Total awards</b>	<b>157</b>	<b>3,285</b>	<b>632</b>	<b>368</b>	<b>920</b>		<b>5,362</b>

Source: HEA, QQI, SOLAS/ETBI

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

At just 1.2% in 2021, the share of graduates in Ireland who had studied agriculture and vet was one of the lowest in the EU (ranked 21<sup>st</sup> out of 27 countries), although few countries had high shares in this field: the EU average was 1.8%, while Romania had the highest share at 4% (Figure 9.3).

**Figure 9.3 Agriculture & vet graduates as a share of third level graduates, 2021**



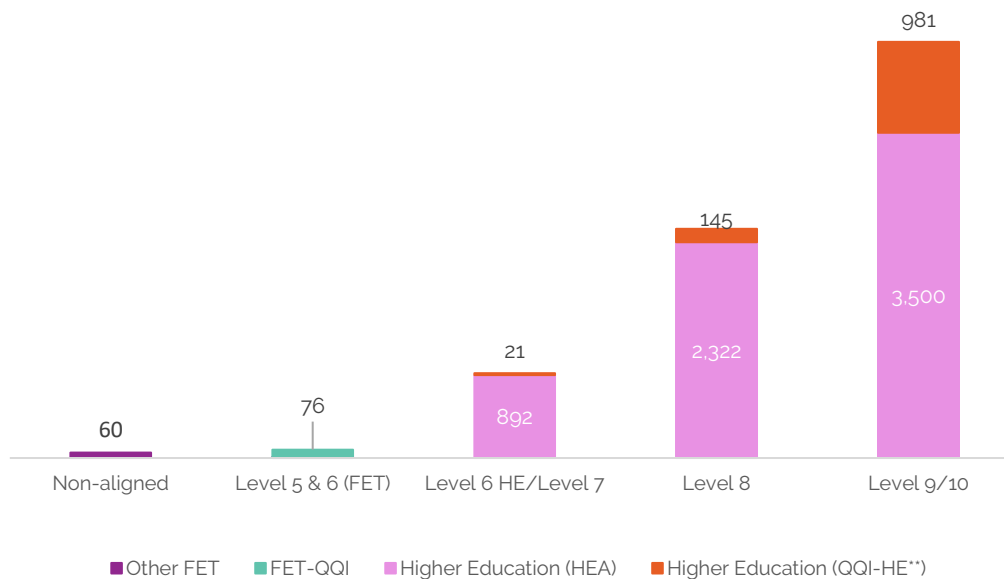
Source: Eurostat (date extracted 17.08.2023)

# 10. Education Awards

## How many awards were made in education in 2022?

- There were over 8,000 awards in education related subjects, making up 6% of all awards made in the FET and higher education sectors in 2022 (Figure 10.1).
- Almost all awards made in this field were higher education awards (98%), partly because entry to primary and post-primary teaching occupations requires at least a level 8 qualification. FET awards made to those studying early childhood care and education are mostly categorised in a separate field of learning (health & welfare).
- More than half (56%) of all education-related awards were made at levels 9 or 10, by far the highest share across all fields of learning.
- Almost all education awards were either on or aligned with the NFAQ.
- Learners at private, independent colleges accounted for over 1,100 awards in this field, the vast majority at postgraduate level (86%).

Figure 10.1 Awards in the education field of learning, by NFAQ level 2022\*



Source: HEA, QQI

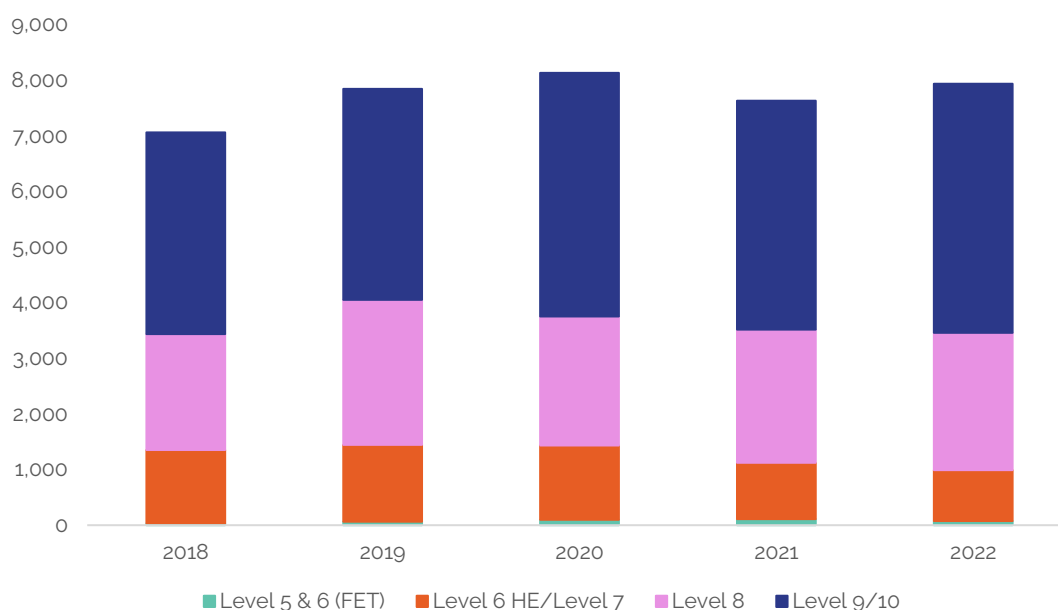
\*Other FET awards excludes a small number (<20) FET awards in the 'Other FET' category

\*\*Higher ed (QQI-HE) awards include only major awards those made to learners at private, independent colleges and other non-HEA aided institutions.

## How does this compare to preceding years<sup>21</sup>?

- Between 2018 and 2022, the number of awards in the education field of learning grew by 12% (or nearly 900 awards).
- Most of this increase was due to a rise in the number of level 9/10 awards (by approximately 850 awards); in addition, the number of level 8 awards also grew (by nearly 400 awards), while level 6 HE/level 7 awards fell by 31% (400 fewer awards).
- Between 2021 and 2022, the number of awards increased by 4% (or just over 300 awards); again, the level 9/10 awards showed the highest rate of growth (+9%). In terms of sector, the number of QQI higher education awards made to learners at private, independent third level colleges fell slightly by 2% compared to a 6% increase for all awards in the HEA sector.
- In the year to 2022, the number of FET sector awards, which accounted for a relatively small number of awards in this field, fell by nearly one third (36 fewer awards), although these declines were offset by increases in the non-QQI FET awards category (not shown in graph); the numbers involved are small with just 63 additional awards.

Figure 10.2 Awards in education by NFQ level 2018-2022



Source: HEA, QQI-FET and QQI-HE

<sup>21</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.



## How do the 2022 awards breakdown by detailed field?

The highest number of awards in 2022 was for the **education science** field, which included courses in education management/leadership and special needs education (Table 10.1). However, classification issues mean that some professional masters in education (teaching qualification) and religious studies awards were also included in this field.

The awards made in the training for **pre-school teachers sub-field** (over 850) were all made in the higher education sector and are in addition to the 4,400 early childhood care and education awards (FET and HE) which were captured earlier in this report in the health and welfare section. Most of the level 6 awards in this sub-field were for leadership/inclusion in early years education.

The majority of the QQI-HE level 9/10 awards were for Professional Master of Education in Primary Education (700 awards) or Post-Primary Education (220 awards).

In addition to the higher education awards in this field, there were 240 level 7 awards for Special Needs Assistant, which were categorised in the generic field (Section 12).

**Table 10.1 Education awards by NQF level and detailed field, 2022**

2022 awards	FET			Higher Education			Total
	NFQ 5 & 6	Other FET	NFQ 6 (HE)	NFQ 7	NFQ 8	NFQ 9/10	
Education n.e.c.	24	60	34	193	105	691	<b>1,107</b>
Education science	52	15	24	47	105	1,610	<b>1,853</b>
Training for pre-school teachers			558	13	298		<b>869</b>
Teacher training without subject specialization			*		1,026	354	<b>1,387</b>
Teacher training with subject specialization				16	788	845	<b>1,649</b>
QQI-HE			1	20	145	981	<b>1,147</b>
<b>Total awards</b>	<b>76</b>	<b>75</b>	<b>913</b>		<b>2,467</b>	<b>4,481</b>	<b>8,012</b>

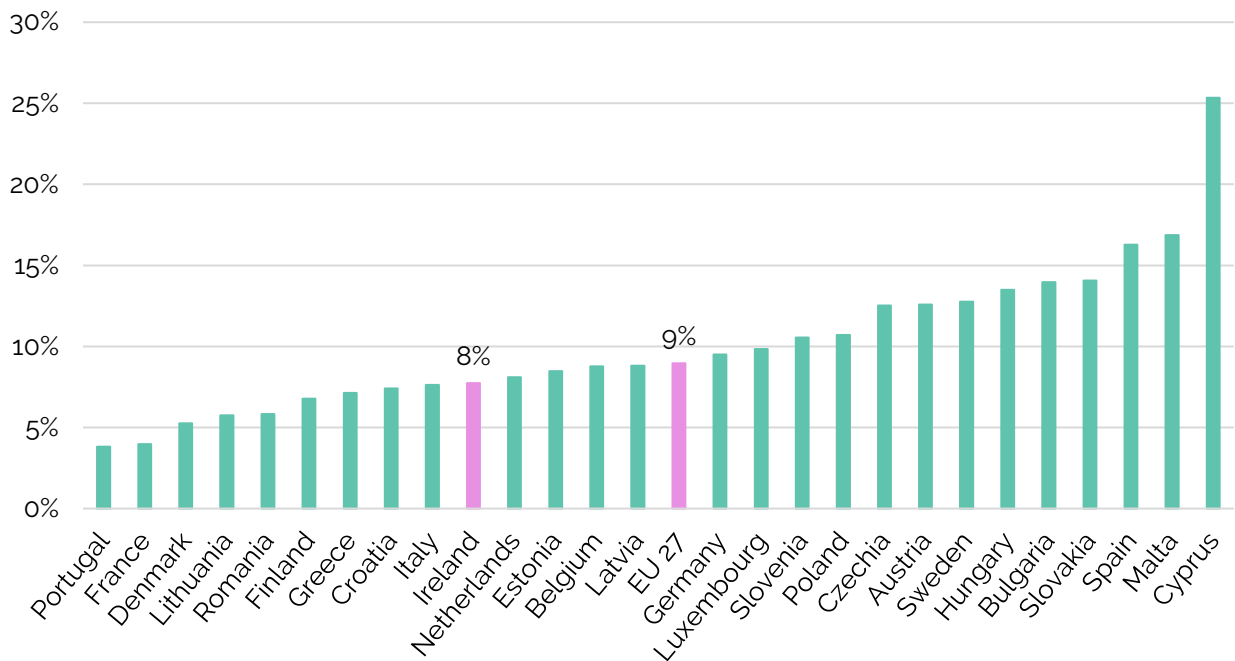
Source: HEA, QQI, SOLAS/ETBI

\*The number of HEA awards was less than 10 and has been suppressed for confidentiality reasons

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

At 8% in 2021, Ireland's share of third level graduates who had studied education-related subjects was just below the EU 27 average (9%), ranking 18<sup>th</sup> highest out of 27 countries (Figure 10.3).

Figure 10.3 Education graduates as a share of third level graduates, 2021



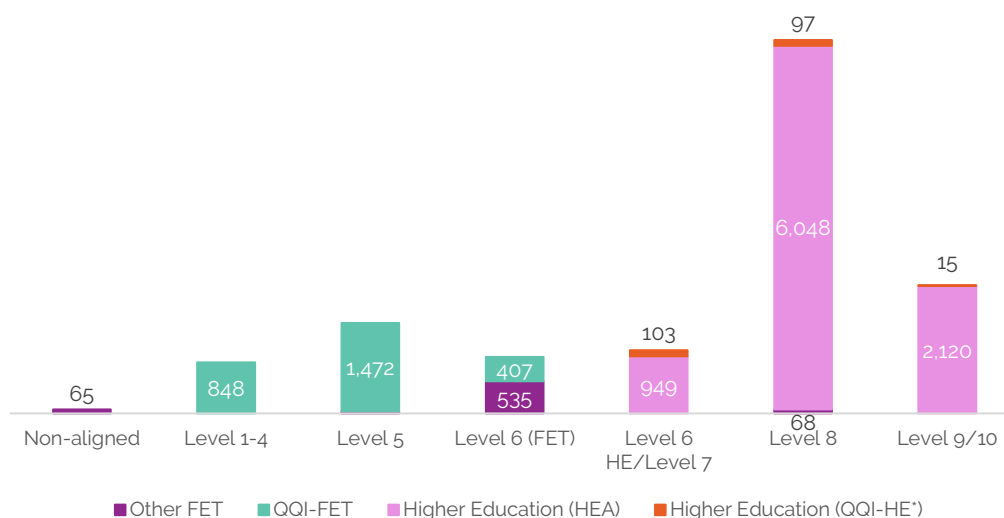
Source: Eurostat (date extracted 17.08.2023)

# 11. Arts and Humanities Awards

## How many awards were made in arts and humanities in 2022?

- There were nearly 12,800 awards in arts and humanities subjects in 2022, accounting for 9% of all FET and higher education awards (Figure 11.1).
- Three quarters (74%) of arts and humanities awards were made in the higher education sector, the fourth highest share (after education, ICT and science) across all fields.
- Compared to other fields, arts and humanities had a relatively large share (7%) of awards at FET level 6: only engineering/construction and agriculture had higher shares (at 19% and 12% respectively).
- Unlike most other fields of learning, more than half of level 6 FET awards (57%) were made, not by QQI, but by other bodies (e.g. Pearson) whose awards are aligned to the National Framework of Qualifications, via their inclusion on the UK National Qualifications Framework.
- This field is the only field where learners enrolled in the FET sector obtained higher education awards, although the numbers involved are relatively small (68 awards in 2022); 30 of these awards were made by non-QQI awarding bodies (e.g. UK universities).

Figure 11.1 Arts & humanities awards by NFQ level and awarding body type, 2022\*



Source: HEA, QQI-FET, QQI-HE & SOLAS/ETBI

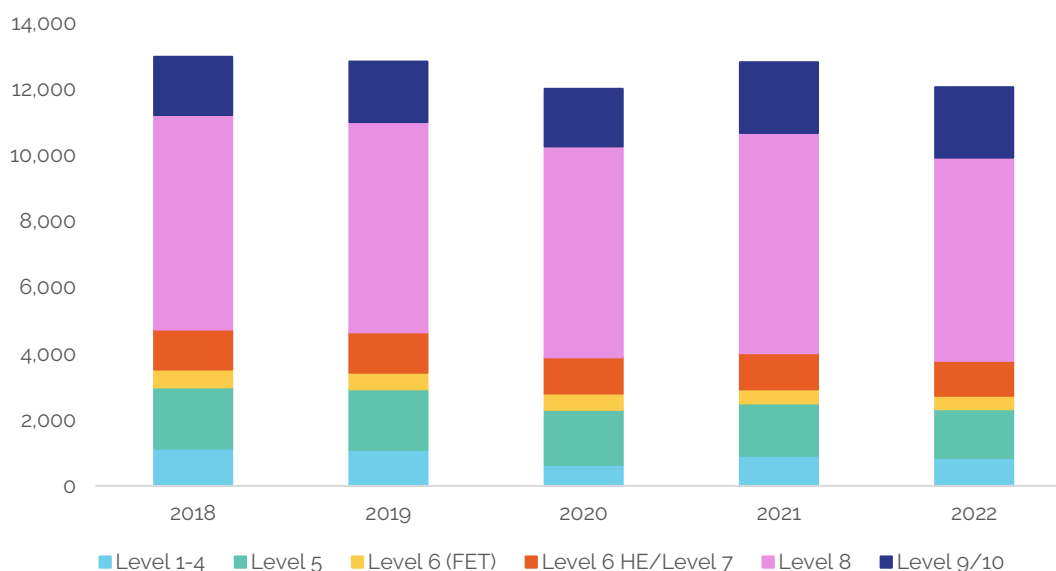
\*Other FET includes 32 level 5 awards (not appearing in the chart)

\*\*Higher ed (QQI-HE) awards include only major awards those made to learners at private, independent colleges and other non-HEA aided institutions.

## How does this compare to preceding years<sup>22</sup>?

- With the exception of 2020-2021, the number of awards in this field has declined annually since 2018; by 2022, the number of awards in arts and humanities was 7% lower than in 2018 (approximately 900 fewer awards); this was the second largest decrease, in absolute terms, observed across all fields of learning (the first being the services field).
- The 6% fall that occurred between 2021 and 2022 was due mainly to an 8% decrease in level 8 in higher education (500 fewer awards) and a 7% fall at level 5 in the FET sector (100 fewer awards), although level 9/10 awards remained relatively stable (less than 10 fewer awards).

Figure 11.2 Awards in arts and humanities by NFQ, 2018-2022



Source: HEA, QQI-FET, QQI-HE

<sup>22</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.

## How do the 2022 awards breakdown by detailed field?

- Just over one third (approximately 4,500 awards) were in the arts & humanities n.e.c. field, where the subject was unspecified (e.g. Bachelor of Arts or BA (hons) degree) or may span both arts and humanities subjects (e.g. music and English). The majority of these awards (nearly 3,700) were in the higher education sector, 84% of which were at level 8.
- **Audio visual and media** awards were almost evenly spread across the FET and higher education sectors and included awards for studies in areas such as film & TV, music, radio and media production.
  - There were over 250 awards in **animation** related areas, including more than 110 non-QQI awards made to learners in the FET sector.
  - There were over 220 awards for studies in **graphic design** across the higher education and FET sectors. In addition, there were 128 graphic design awards captured in the ICT field in the non-aligned FET sector.
- Almost all awards in humanities related fields (i.e. history, philosophy and languages) were made in the higher education sector.

**Table 11.1 Arts and Humanities awards by NFQ level and detailed field, 2022**

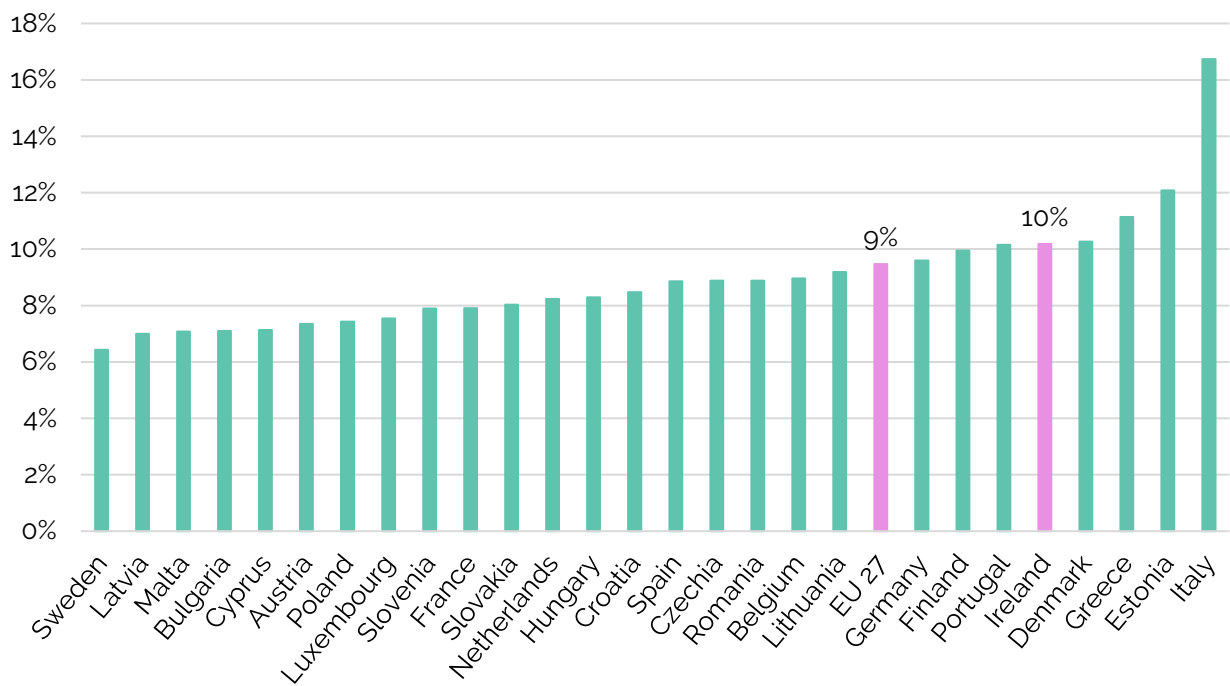
2022 awards	FET				Higher Education			Total
	NFQ 1-4	NFQ 5	NFQ 6 (FET)	Non-aligned	NFQ 6 (HE) & NFQ 7	NFQ 8	NFQ 9/10	
Arts & humanities n.e.c.	848		7		144	3,083	439	<b>4,521</b>
Audio-visual & media		667	365		221	908	224	<b>2,385</b>
Fashion, interior and industrial design		65	66		74	327	81	<b>613</b>
Fine, music & performing arts (inc. handicrafts)		772	504		100	845	332	<b>2,553</b>
History & archaeology					122	230	353	<b>705</b>
Philosophy & religion					53	68	117	<b>238</b>
Languages (inc. acquisition, literature & linguistics)				65	235	655	574	<b>1,529</b>
QQI-HE					103	97	15	<b>215</b>
<b>Total awards</b>	<b>848</b>	<b>1,504</b>	<b>942</b>	<b>65</b>	<b>1,052</b>	<b>6,213</b>	<b>2,135</b>	<b>12,759</b>

Source: HEA, QQI, SOLAS/ETBI

## How does Ireland compare internationally in terms of the share of third level graduates in this field?

At 10%, Ireland had the 5<sup>th</sup> highest share of third level graduates in 2021 who had studied arts and humanities programmes, just above the EU average of 9% (Figure 11.3). Ireland's ranking in terms of its share of graduates in this field compared to other EU countries has risen in recent years: from 6<sup>th</sup> in 2019; and 7<sup>th</sup> in 2020.

**Figure 11.3 Arts/humanities graduates as a share of third level graduates, 2021**



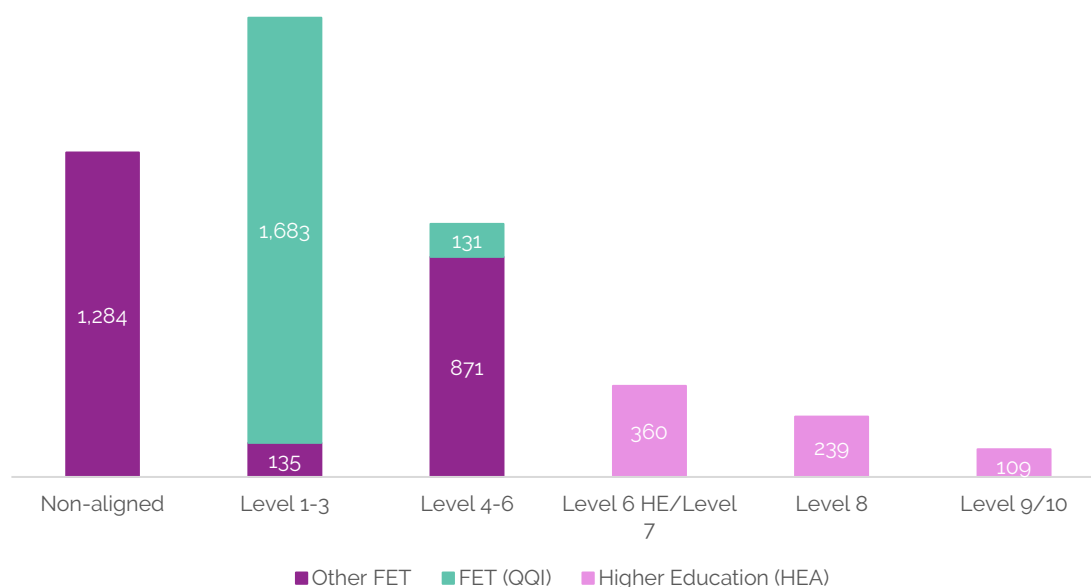
Source: Eurostat (date extracted 17.08.2023)

## 12. Generic Programmes Awards

### How many generic awards were made in 2022?

- The generic programmes field of learning is the smallest field in the FET and higher education system, largely because most education/training programmes beyond the Leaving Certificate have a greater focus on a specific subject or group of subjects.
- This field made up 3% of all awards made in 2022, with approximately 4,800 awards (Figure 12.1); more than one third of awards in this field were made at levels 1-3, followed by a further 21% at levels 4 or 4/5 (i.e. a Leaving Certificate made to learners in the FET sector).
- In FET, QQI-FET awards were for areas such as general learning and employability skills.
- The 1,284 awards in the non-aligned FET sector mostly referred to Near Zero Energy Building (NZEB) awareness courses for which general assessment awards were made (rather than construction-related awards).
- Higher education awards amounted to approximately 700 and included courses, possibly due to the nature of classification, such as project management (273 awards) and special needs assisting (241 awards).

Figure 12.1 Awards in the generic programmes field by NFQ, 2022

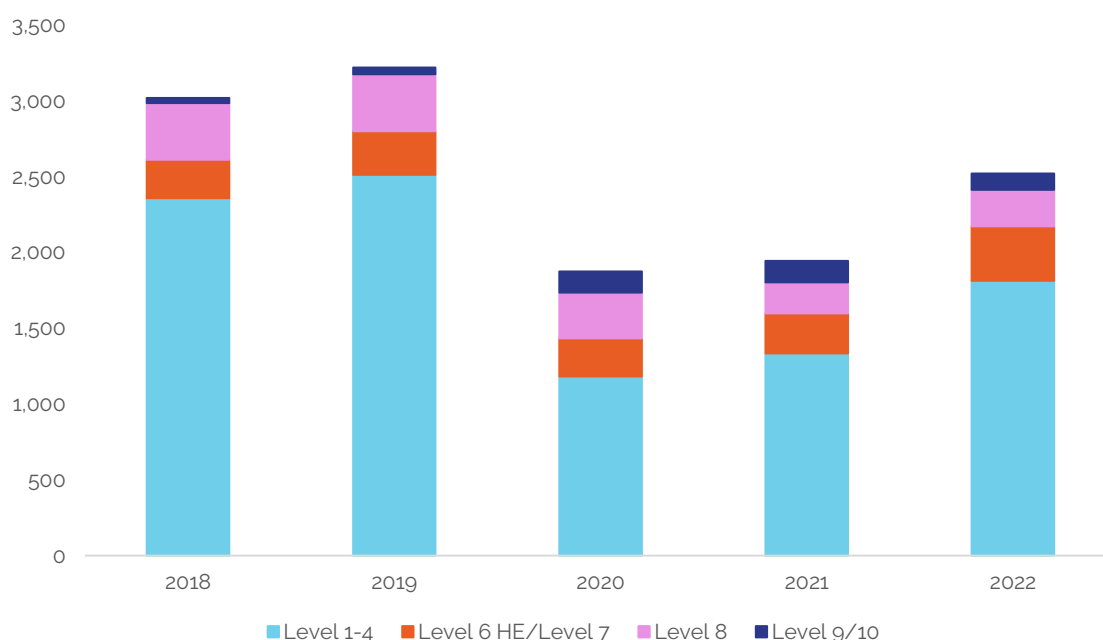


Source: HEA, QQI, SOLAS/ETBI

## How does this compare to preceding years<sup>23</sup>?

- The number of awards made for generic programmes fell by 17% between 2018 and 2022, with most of the decline occurring between 2019 and 2020.
- Between 2021 and 2022, the number of awards increased by 30% (by almost 600 awards), most of which occurred at FET levels 1 to 4 (+36%), with a further rise at level 6 HE/level 7 (+37%) and level 8 (+16%). Level 9/10 was the only NQF level to see a fall over the two years, albeit with relatively small numbers (just over 30 fewer awards).
- The increase observed in higher education awards may also be due to some field classification issues, with some awards captured under personal skills development that could arguably be categorised elsewhere (e.g. business).

Figure 12.2 Generic programmes awards by NQF level, 2018-2022



Source: HEA and QQI-FET

## International Comparison

The vast majority of EU countries had no third level graduates in this field. In 2021, Ireland was one of only four EU countries to do so. In fact, Ireland accounts for 96% of all EU-27 graduates in this field, with much smaller shares for Czechia and Lithuania.

<sup>23</sup> As the PLSS database was only fully rolled out mid-2018 onwards, these learners have been excluded from time series data.



# 13. Education profile of adults in Ireland

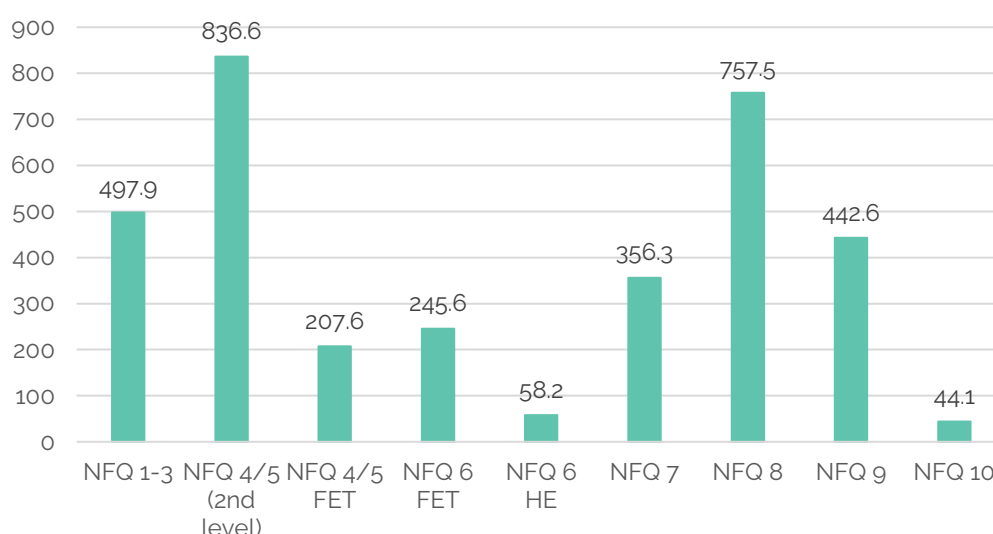
In this section we examine the educational profile of Ireland's adult population, using data from the CSO's Labour Force Survey (LFS). An individual's level of education refers to the highest level of education achieved; if for example a person first qualifies as an electrician (level 6 certificate) and later progresses to achieve an honours bachelor degree (level 8), their level of education is classified as level 8. On the other hand, if a person first achieves an honours degree (level 8) in arts/humanities, but later completes a PLC course in business studies (level 6), their education level is nonetheless captured as being at level 8.

## What is the education level of adults in Ireland?

In quarter 2 2023, there were approximately 3.52 million adults aged between 20 and 74 years. Of those who stated their highest level of education (nearly 3.45 million persons),

- approximately 1.33 million people (or 39%) of all adults aged 20-74 years held at most second level qualifications; of these, 836,600 held a Leaving Cert or equivalent and 497,900 persons had attained at most NFQ 3 qualifications (Figure 13.1)
- FET qualification holders (spanning levels 4-6) accounted for 453,200 persons (13% of the total age cohort)
- third level qualification holders (spanning levels 6 (HE)-10) made up nearly 1.66 million persons (48%); the largest numbers were at level 8, which had 757,500 persons.

**Figure 13.1 Adults aged 20-74 years by highest level of education attained (000s), Q2 2023**



Source: SLMRU analysis of CSO (LFS) data  
Excludes observations where NFQ level is not stated

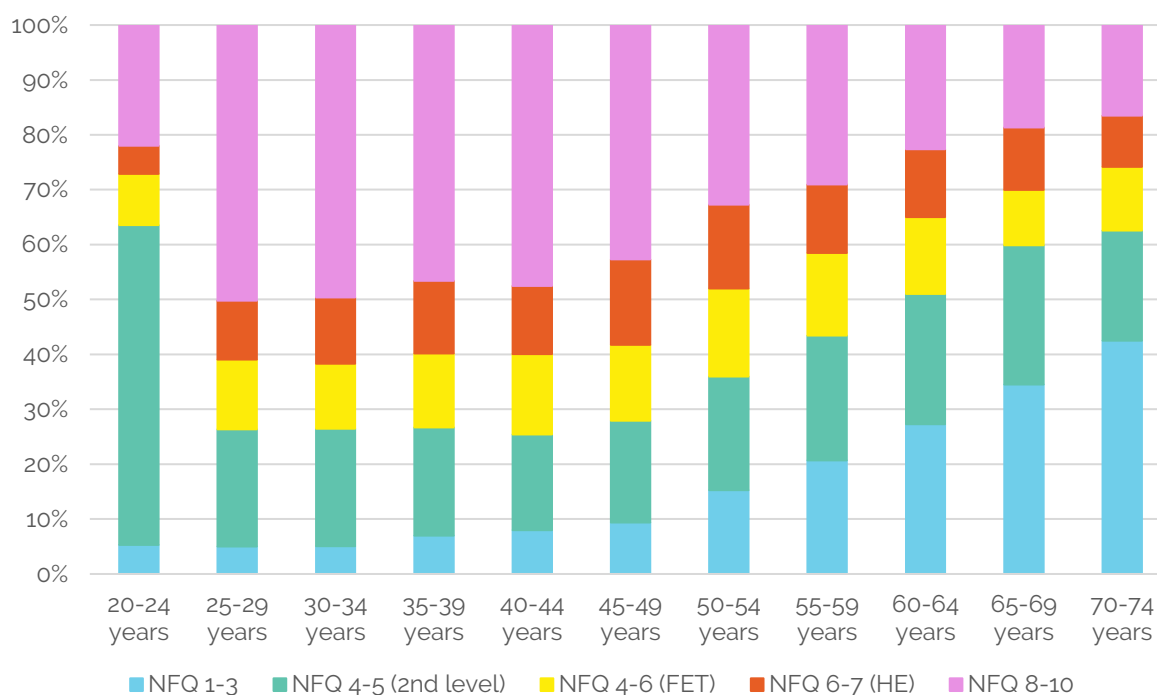
## How does the education profile of adults vary by age?

The educational profile of the population differed considerably by age group (Figure 13.2). With the exception of persons aged 20-24 years (for whom full-time education may still be ongoing), the older the age group, the lower the education attainment level. In fact, nearly one half of all persons holding at most a level 3 qualification were concentrated in the 60-74-year-old cohorts. In quarter 2 2023,

- one half of persons in the 25-29 year-old and 30-34 year-old cohorts held a qualification at level 8 or above; this was more than double the share for those aged 60-64 years, where 23% held level 8 or higher qualifications
- conversely, while 5% of 25-29-year-olds (15,200 people) held at most a level 3 qualification (e.g. a Junior Certificate), the share is three times higher (15%) for 50-54 year-olds (51,600 people) and more than four times higher (21%) for those aged 55-59 years (62,900 people).

Given the educational attainment observed amongst the younger age cohorts, it can be expected that Ireland's educational profile will continue to shift towards the higher levels of the NFAQ in the years to come.

**Figure 13.2 Education profile by NFAQ level and age group (20-74 years), Q2 2023**



Source: SLMRU analysis of CSO (LFS) data

*Excludes observations where NFAQ level is not stated*

## How does the education profile of adults differ by region?

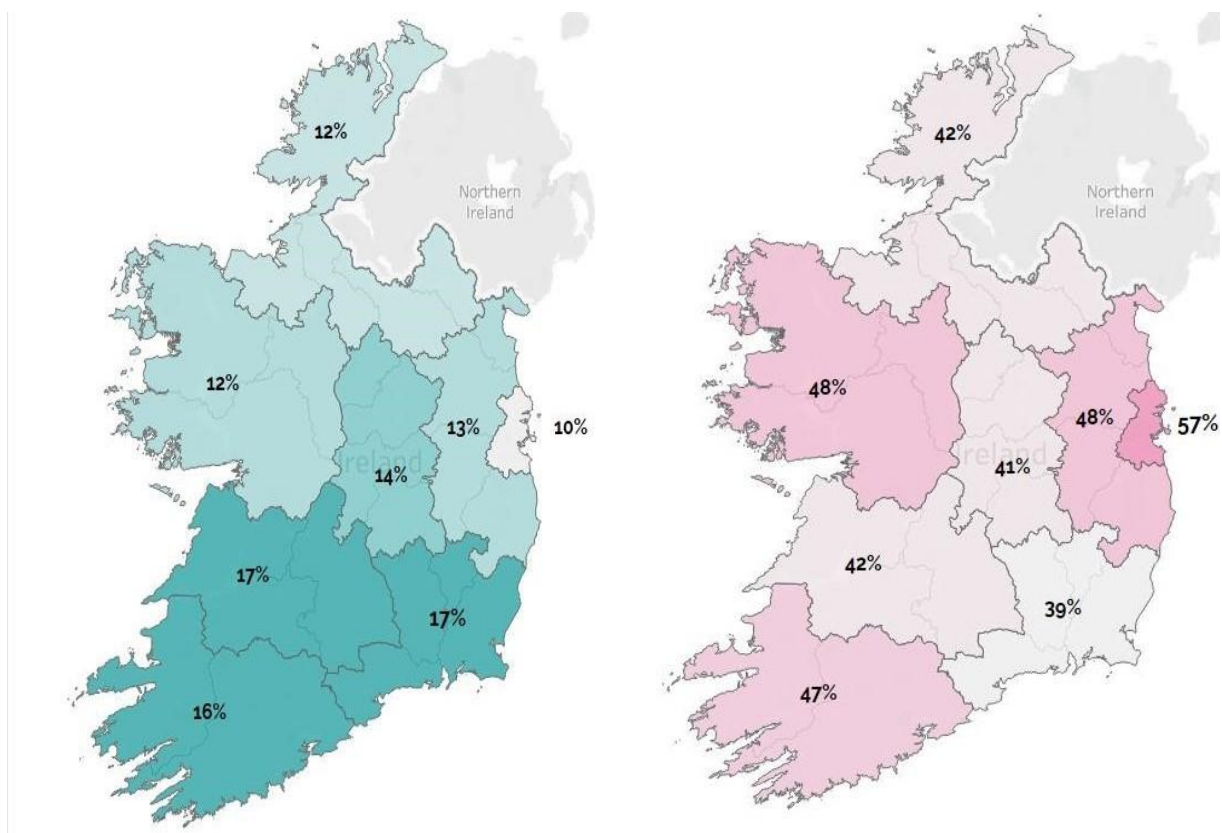
Figures 13.3a and 13.3b show the share of each region's adult population holding FET and higher education qualifications respectively in quarter 2 2023. On average, 13% of adults in Ireland held FET qualifications; however, the share was highest in the Mid-West and South East regions (at 17%), as well as the South West (at 16%), and lowest in Dublin (10%).

The share of higher education qualification holders was largest in the Dublin Region at 57%, well above the national average of 48%. At 39%, the South East region had the lowest share of higher education qualification holders amongst adults, followed by the Midlands at 41%.

**Figure 13.3 Shares of qualification holders by region, higher education and FET, Q2 2023**

a. Share of FET qualification holders

b. Share of higher education qualification holders

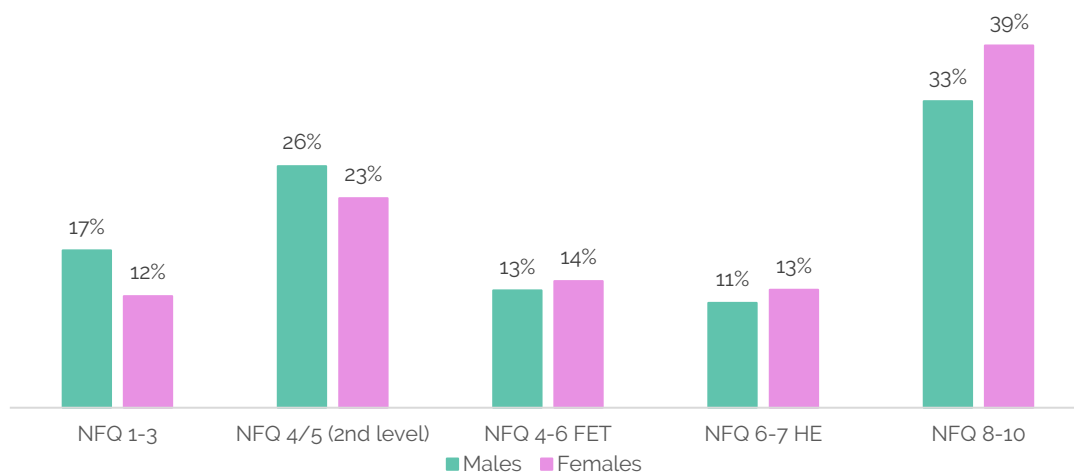


Source: SLMRU analysis of CSO (LFS) data

## How does the education profile of adults vary by gender?

At 39% in quarter 2 2023, the share of females with qualifications at the higher end of the National Framework of Qualifications (NFQ 8-10) was greater than that of males (33%) (Figure 13.4). Males, on the other hand, had a higher share with second level qualifications, at 26%; the share for females at this level was 23%. The share of FET qualification holders for males and females was similar at 13% for males and 14% for females.

**Figure 13.4 Males & females (aged 20-74 years) by highest qualification level, Q2 2023**



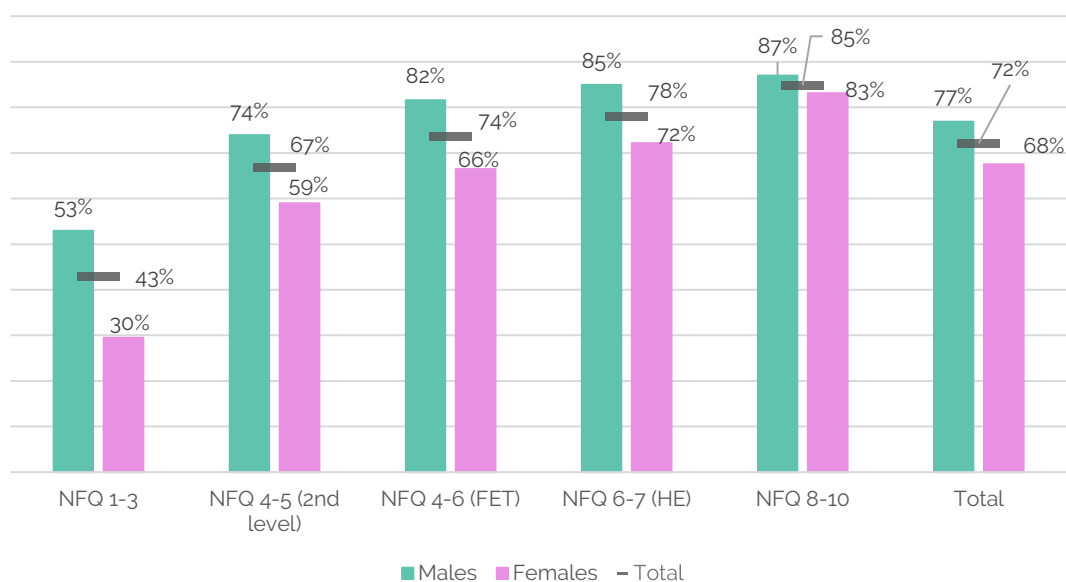
Source: SLMRU analysis of CSO (LFS) data

*Excludes observations where NFQ level is not stated*

## How does employment vary by NFQ level?

In quarter 2 2023, nearly 2.49 million people (aged 20-74 years) were employed, which represented almost three quarters (72%) of the population in this age group. The employment rate of adults increased with NFQ level, with the share at NFQ 8-10, at 85%, nearly twice as high as those with NFQ 1-3 qualifications, at 43% (Figure 13.5). In addition, the employment rate of this cohort varied by gender, being 77% for males and 68% for females. Regardless of NFQ level, the shares in employment for males were higher than those of females, although the higher the NFQ level, the smaller the gender gap: at NFQ 8-10, the gender gap was just four percentage points, compared to 23 percentage points and 15 percentage points for those with NFQ 1-3 and NFQ 4/5 second level qualifications, respectively.

Figure 13.5 Employment rate of 20-74-year olds by NFQ level and gender, Q2 2023



Source: SLMRU analysis of CSO (LFS) data

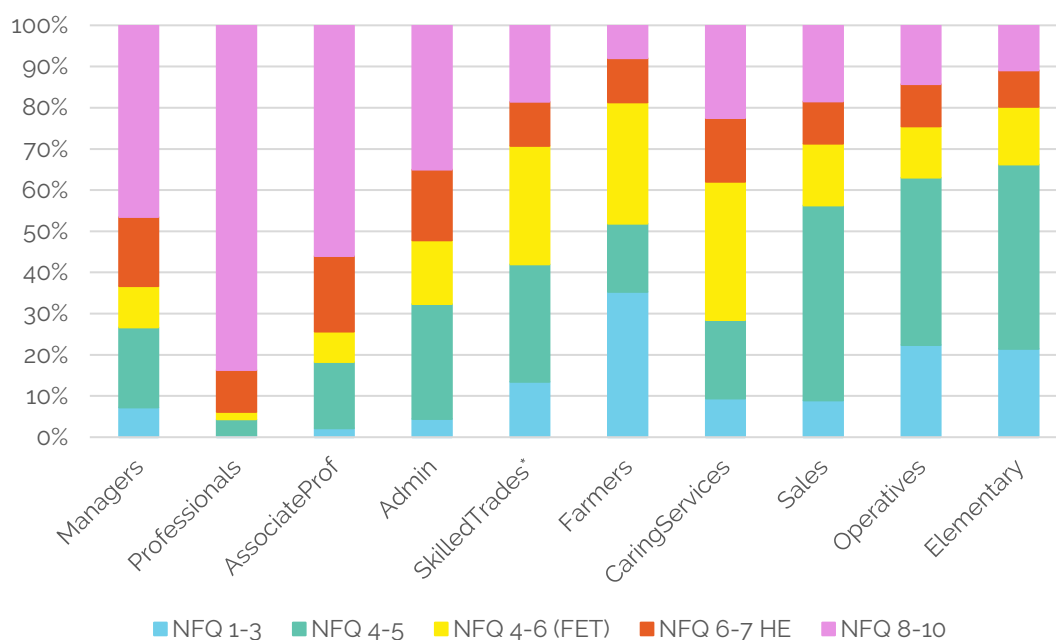
*Excludes observations where NFQ level is not stated*

## How does the education profile of workers vary by NFQ level?

Figure 13.6 compares employment by NFQ levels across broad occupational groups, although farming occupations have been separated from skilled trades for the purposes of this study.

- More than one half of persons working in managerial, professional, associate professional and administrative occupations held third level qualifications (i.e. NFQ 6-10)
- Conversely, more than one half of those working in farming, sales, operative and elementary occupations held, at most, a Leaving Certificate (i.e. NFQ 4/5); while individuals in these four occupations were most likely to hold level 4/5 qualifications, farmers was the only occupation where the greater share held was, at most, a Junior Certificate (35%), which is in part related to the older age profile of farmers (61% were aged 55 years or more compared to a national average of 19%, National Skills Bulletin, 2023)<sup>24</sup>.
- The share of FET qualification holders was highest in the caring & personal services (e.g. healthcare assistants, hairdressers), farmers and skilled trades occupations (e.g. carpenters), a reflection of the level 5 and level 6 entry requirement typically associated with many of these occupations.

**Figure 13.6 Share of employment by occupation and NFQ level, Q2 2023**



Source: SLMRU analysis of CSO (LFS) data

*\*Skilled trades occupations exclude farmers; associate professionals at NFQ 1-3 and for farmers at NFQ 6-7 and NFQ 8-10 are small and should be interpreted with caution. The number of professionals holding NFQ 1-3 qualification is too small to report. Excludes observations where NFQ level is not stated*

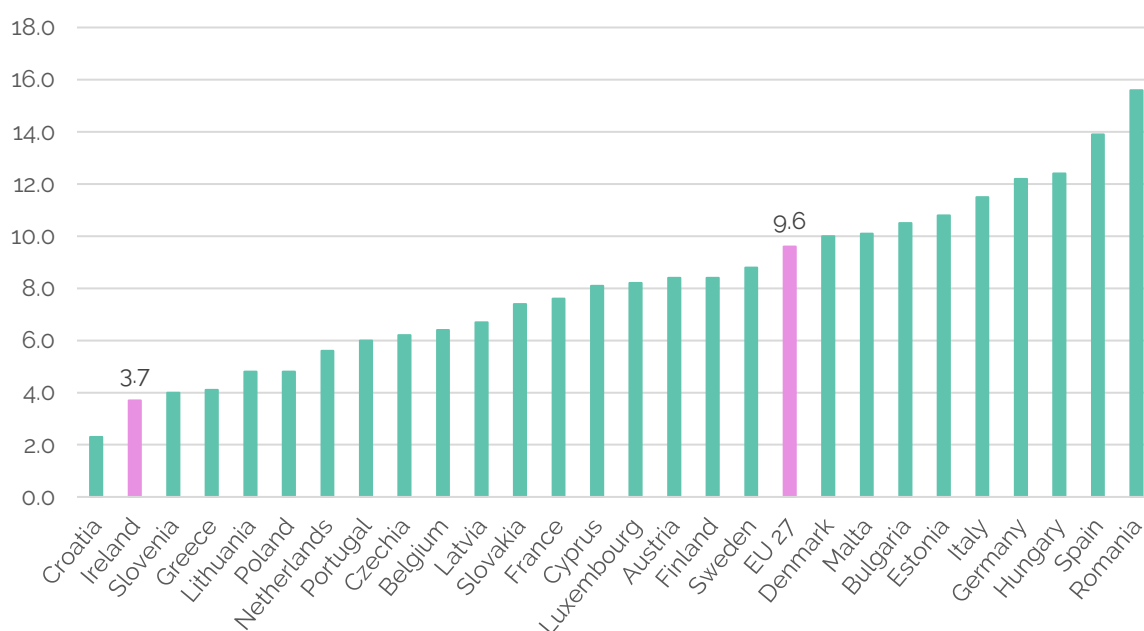
<sup>24</sup> See <https://www.solas.ie/f/70398/x/940b9df162/national-skills-bulletin-2023.pdf>

## EU comparison: early leavers from education

Eurostat (the EU's statistical agency) provides statistics on the education profile and employment status of adults by ISCED level of education.

Early leavers from education are defined as the percentage of the population aged 18-24 years who have attained at most lower secondary education and have not engaged in education or training (Eurostat, 2022)<sup>25</sup>. Figure 13.7 shows that Ireland has the second lowest rate of early leavers from education and training in the EU. In 2022, Ireland's rate of 3.7% is less than half of the EU average of 9.6%. Across the EU, early leaving tends to be higher amongst males than females, with the exception of Bulgaria and Greece. In Ireland, the rate for males was 4.7% compared to 2.8% for females.

Figure 13.7 Early leavers aged 18-24 years in the population in the EU (%), 2022



Source: Eurostat (data extracted 18.10.2023)

<sup>25</sup> Based on the Eurostat definition of early leavers, there was no involvement in education or training during the four-week period before administration of the EU Labour Force Survey.

## EU comparison: employment rate by education level

Figures 13.8–13.10 show how the educational profile and employment rates varied by ISCED education level across the EU in 2022; the data refers to 20-64 year olds with one of three broad education attainment levels: those with at most lower secondary educational attainment, those with upper secondary or post-secondary, non-tertiary education attainment, and those with tertiary education attainment. The NFQ levels typically associated with these ISCED education levels are detailed in Table A1 of the Appendix.

Across the EU, the higher the level of educational attainment, the higher the employment rate. On average, 57% of 20-64-year-olds in the EU with at, most, **lower secondary educational attainment** were in employment (Figure 13.8). Ireland's share was slightly lower, at 54%, and well behind countries such as Portugal, the Netherlands and Estonia, among others, where the employment rates for persons with this educational attainment were 70%, 68% and 67% respectively.

**Figure 13.8 Employment rate (%) and % of population with lower secondary or less education in EU 27 countries (20-64 yrs), 2022**



Source: Eurostat (data extracted 18.10.2023)

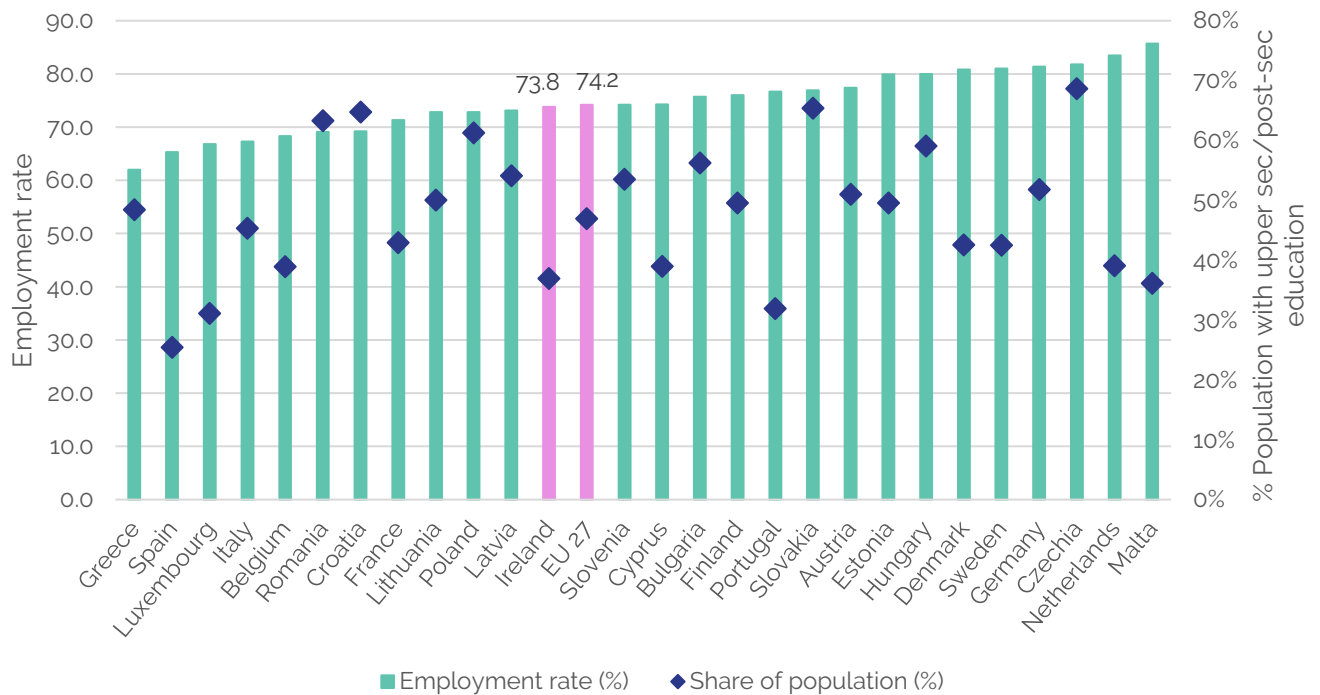
It is worth noting, however, that Ireland's share of the 20-64-year-old population at this education level was considerably lower than the EU 27 average (20%), at just 11% in 2022. There are only seven EU countries with a smaller share of the population with lower secondary or less education, while just three of these have a higher employment rate compared to Ireland (Latvia, Czechia and Estonia). In absolute numbers, the 11% share in



Ireland represents 335,200 people<sup>26</sup>; therefore, while the employment rate is comparatively low for those with, at most, lower secondary education, the number impacted in Ireland is also comparatively low.

As shown in Figure 13.9, on average, 74.2% of 20-64-year-olds in the EU with at **upper secondary/post-secondary, non-tertiary education** (corresponding, for example, to Leaving Cert or FET in Ireland) were in employment. Ireland's share was similar, at 73.8%. The highest employment rate was observed for Malta at 85.7%. The share of persons in Ireland holding qualifications at this level is below the EU 27 average of 47%, at 37%, which is the fifth lowest in the EU (refers to 2022 annual average).

**Figure 13.9 Employment rate (%) and % of population with upper secondary and post-secondary, non-tertiary education in EU 27 countries (20-64-yrs), 2022**

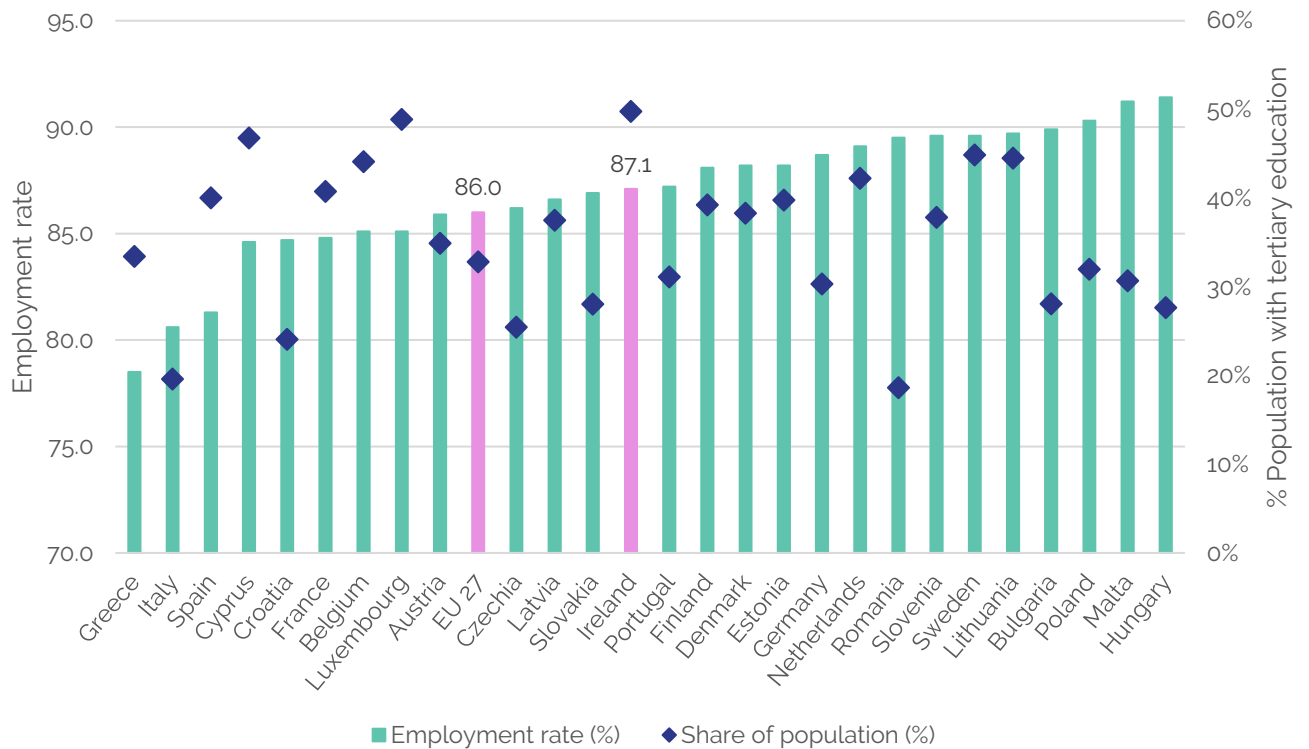


Source: Eurostat (data extracted 18.10.2023)

<sup>26</sup> Refers to 2022 annual average (source: Eurostat).

On average, 86% of 20-64-year-olds in the EU with **tertiary education** were in employment (Figure 13.10). At 87%, Ireland's share was just above the EU average. Fourteen countries had employment rates of 87% or more. However, Ireland also has the highest share of its population in this cohort who held third level qualifications in 2022, at nearly 50%, well above the EU 27 average of 33%.

**Figure 13.10 Employment rate (%) and % of population with tertiary education in EU 27 countries (20-64-yrs), 2022**



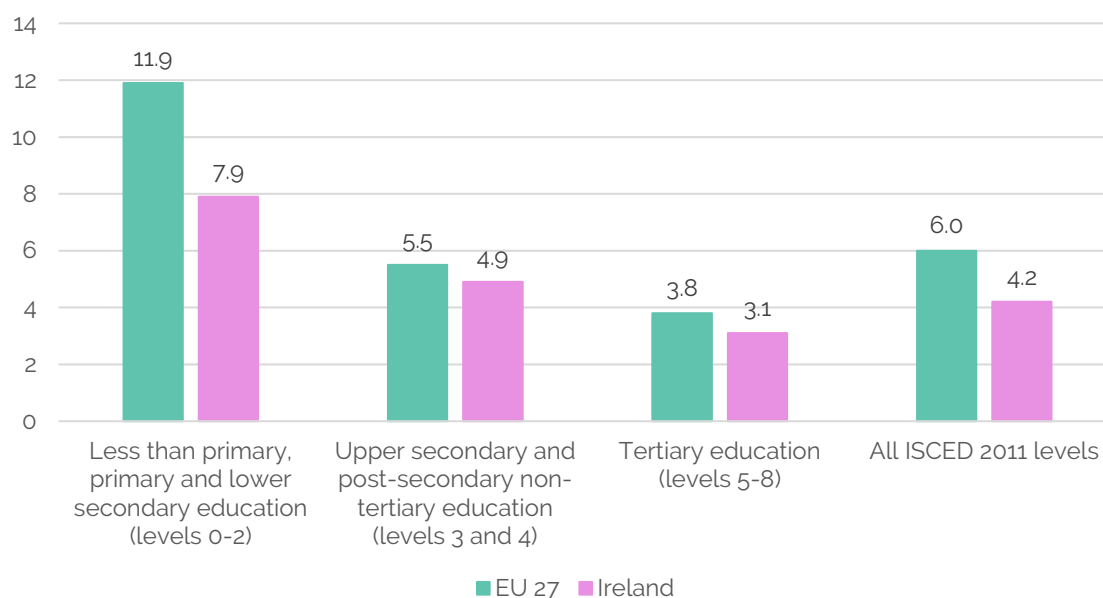
Source: Eurostat (data extracted 18.10.2023)

## EU comparison: unemployment by education attainment level

As seen earlier in this section, employment rates in Ireland and the rest of the EU tend to vary by education level; hence it is not surprising to find similar variations in the unemployment rate by education.

When compared to the EU average (6%), Ireland's total unemployment rate for adults aged 20-64 years was lower (4.2%) (Figure 13.11). For both the EU average and for Ireland, the greater the level of educational attainment, the lower the unemployment rate. Ireland's unemployment rate was lower than the EU average for all levels of educational attainment, especially for those with at most lower secondary (i.e. NQF 3) educational attainment, where the rates were 7.9% and 11.9% respectively.

**Figure 13.11 Unemployment rate (%) (20-64 yrs) by ISCED education levels in Ireland and EU 27 average, 2022**



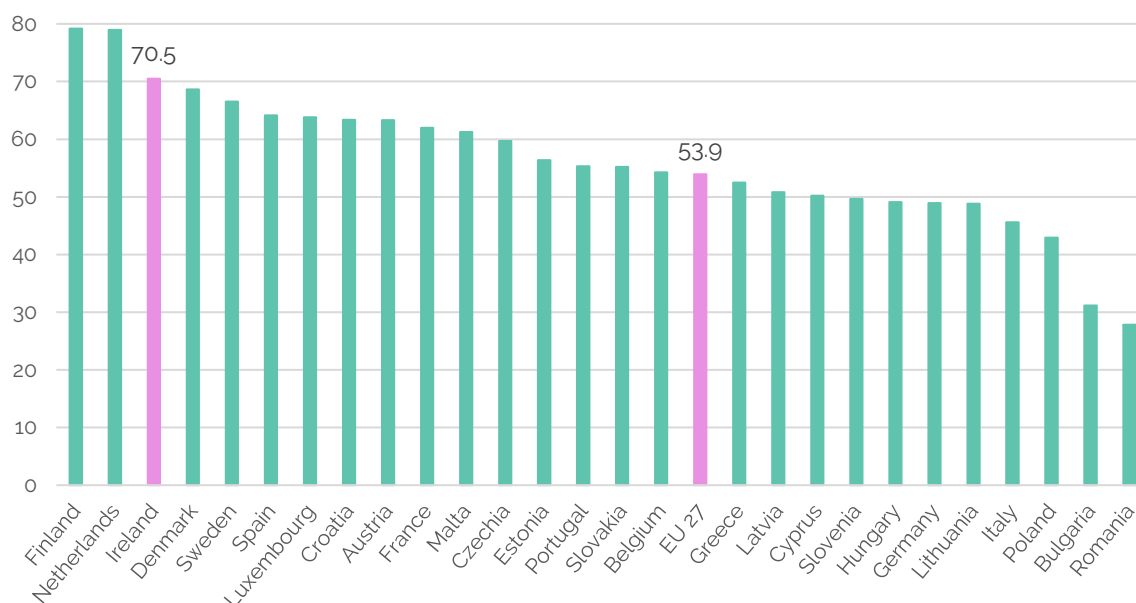
Source: Eurostat (data extracted 18.10.2023)

## EU comparison: digital skills by education attainment level

Digital skills are deemed valuable for a range of different employment roles and occupations. Furthermore, during the Covid-19 pandemic, the mode of delivery for many education courses changed from being in person to remote learning. For the purpose of measuring digital skills, the Digital Skills Indicator 2.0 (DSI) is based on certain activities linked to using the internet and computer software.<sup>27</sup>

Figure 13.12 shows Ireland had the third highest rate of having basic or above basic digital skills in the EU after Finland and the Netherlands, at 70.5%, compared to an EU average of 53.9%.

**Figure 13.12 Individuals (16-74 yrs) with basic or above basic digital skills (%) in EU 27 countries, 2021**

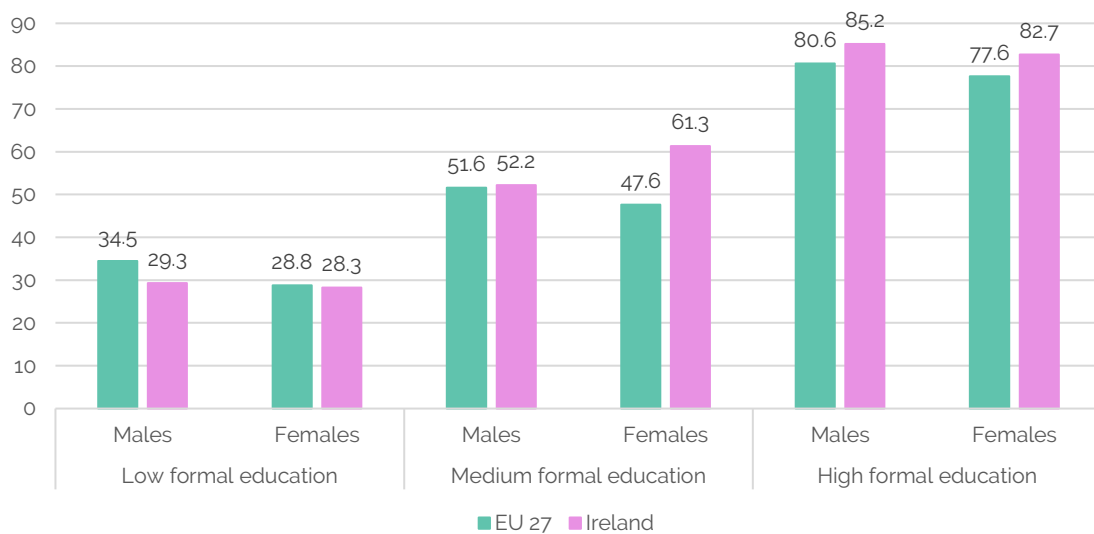


Source: Eurostat (data extracted 11.09.2023)

<sup>27</sup> These activities are as follows: information and data literacy; communication and collaboration; digital content creation; safety; and problem solving. See the Eurostat explanatory text here for more information, [https://ec.europa.eu/eurostat/cache/metadata/en/isoc\\_sk\\_dskl\\_i21\\_esmsip2.htm](https://ec.europa.eu/eurostat/cache/metadata/en/isoc_sk_dskl_i21_esmsip2.htm)

The tendency to have basic or above basic digital skills varies by gender and educational attainment. Figure 13.13 shows that males are more likely than females to have basic or above basic digital skills for each educational level (except for those with medium formal<sup>28</sup> education in Ireland where 61.3% of females are deemed to have basic or above basic digital skills compared to 52.2% of males). Furthermore, the tendency to have basic or above basic digital skills increases with higher educational attainment levels in both Ireland and based on the EU average.

**Figure 13.13 Individuals (16-74 yrs) with basic or above basic digital skills (%) by gender and educational attainment in EU 27 countries, 2021**



Source: Eurostat (data extracted 11.09.2023)

<sup>28</sup> The education levels are defined as: low (less than primary, primary and lower secondary education); medium (upper secondary and post-secondary non-tertiary education); and high (tertiary education) (Eurostat). See [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Educational\\_attainment\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Educational_attainment_statistics)

## 14. Recent Graduates

Internationally, organisations such as the OECD, Eurostat and others define recent graduates as persons aged 20-34 years who obtained a qualification in the preceding three years. However, as the number of observations in the data for this cohort in Ireland was relatively small and in order to facilitate an analysis by level in this report, recent graduates are defined as persons aged 20-34 years who obtained a qualification between 2019 and the first half of 2023.

### At what level have recent graduates obtained qualifications?

In quarter 2 2023, there were 408,200 recent graduates, which was similar to that in 2022 (408,400). Of these,

- more than one half (54%) had attained a higher education qualification, mostly at level 8 or above
- 12% had obtained a FET qualification
- 33% had obtained a Leaving Cert (or equivalent) qualification, corresponding to levels 4-5, on the NFQ.

When compared to one year earlier, the number of recent graduates with FET or NFQ 4/5 qualifications (e.g. a Leaving Cert) grew (by 2,100 and 5,200 persons respectively, or 5% and 4%) while the numbers with a higher education qualification fell by 8,300 persons (or 17%), especially at NFQ 6-7 (HE) (-6,900 persons or -16%).

The numbers who obtained a qualification at level 1-3 in this age cohort were too small to report. This is mostly because the majority of persons aged 20-34 are likely to have already attained qualifications at this level prior to 2019, when they were aged 15 or 16 years: almost all pupils who enrol in first year of secondary school go on to sit the Junior Certificate three years later (e.g. of the almost 62,400 pupils who enrolled in the first year of the Junior Cycle programme in 2014, almost 98% completed the Junior Certificate<sup>29</sup>).

**Table 14.1 Recent graduates by level of qualification obtained, Q2 2023**

NFQ Level	Recent graduates	Recent graduates %
Level 1-3	***	***
Level 4-5 (second level)	136,400	33%
Level 4-6 (FET)	47,200	12%
Level 6-7 (HE)	35,100	9%
Level 8-10	183,800	45%
<b>All levels</b>	<b>408,200</b>	<b>100%</b>

Source: SLMRU analysis of CSO (LFS) data

*Excludes observations where NFQ level is not stated*

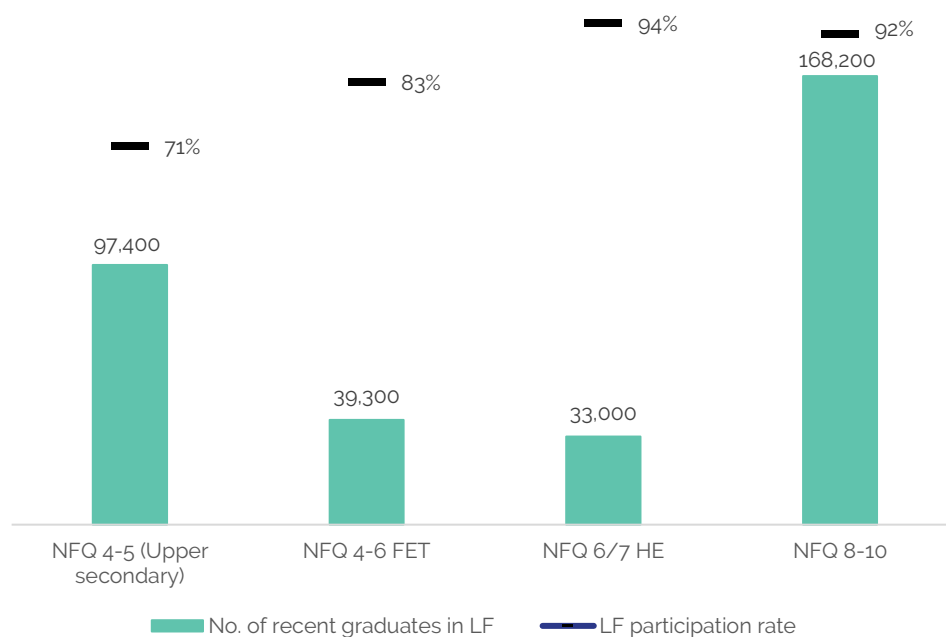
<sup>29</sup> Department of Education and Skills series of reports on retention rates of pupils in second-level schools. See <https://www.gov.ie/pdf/?file=https://assets.gov.ie/203522/017c3bc0-011c-468a-af67-f3e3091a1df4.pdf#page=null>

## Labour force status of recent graduates

In quarter 2 2023, 83% of the 408,200 recent graduates were in the labour force, representing 338,600 persons. This is similar to the 82% figure recorded for quarter 2 2022. Recent level 4-5 graduates from the second level system (e.g. Leaving Cert) had the lowest share at 71%, while the highest shares were observed for those with NFQ 6/7 higher education qualifications (94%) (Figure 14.1).

The gap in the share in the labour force for persons with level 4-5 upper secondary qualifications compared to those with FET level 4-6 qualifications is partly due to the fact that some people in this cohort may have yet to complete their education, with many opting to pursue further studies in the FET or higher education sectors rather than entering the labour force. Data from the CSO shows that at least one quarter of FET graduates<sup>30</sup> progressed to higher education in the year directly following FET programme completion.

**Figure 14.1 Number of recent graduates in the labour force and their labour force participation rates by NFQ level, Q2 2023**



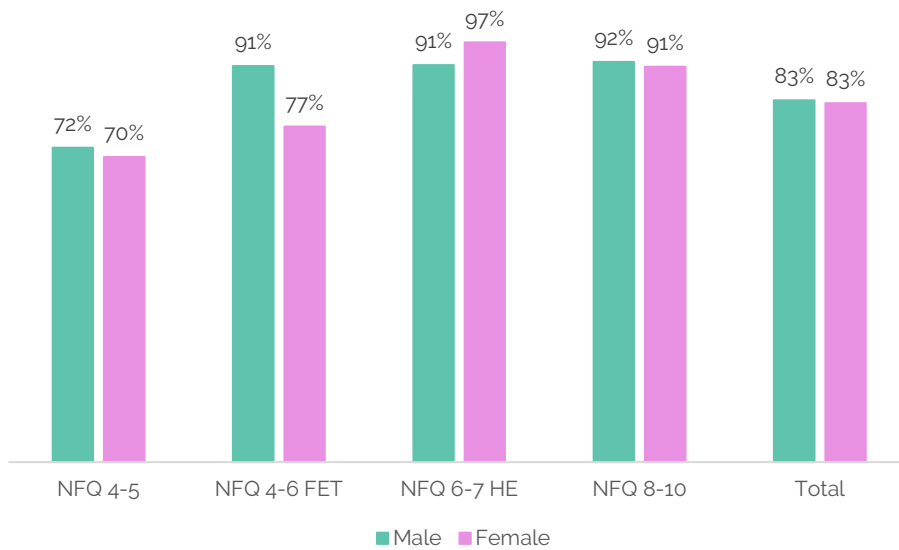
Source: SLMRU analysis of CSO (LFS) data

*Excludes observations where NFQ level is not stated*

<sup>30</sup> Refers to those who obtained QQI major awards only and is therefore a subset of total FET graduate numbers. <https://www.cso.ie/en/releasesandpublications/ep/p-feo/furthereducationoutcomes-graduationyears2010-2016/outcomeseducation/>

When the gender of recent graduates is explored, some variations in labour force participation can be seen (Figure 14.2). With the exception of NFQ levels 6-7 higher education where female participation of recent graduates is higher than that for males (97% and 91% respectively), the participation of males exceeds that of females for all other levels (although being fairly similar at levels NFQ 8-10). When all NFQ levels are looked at, the participation of males and females is the same, at 83%.

**Figure 14.2 Labour force participation for recent graduates by NFQ level and gender, Q2 2023**



Source: SLMRU analysis of CSO (LFS) data

*Excludes observations where NFQ level is not stated*



# Appendix

## ISCED levels of education and associated NFQ award levels

Table A1 shows the formal ISCED levels, the typical programmes in Ireland that correspond to these levels, the name of the award typically (but not exclusively) associated with completion of a programme, as well as the award's NFQ level. As can be seen, some award levels span more than one sector (e.g. awards at level 4 and 5 are available in both the secondary school system and the further education and training (FET) system). Similarly, awards at level 6 span the FET and higher education system. Where relevant, and where the data allows, in addition to presenting awards by NFQ level, we also provide an indication of the sector (e.g. level 6 (FET) or level 6 (higher education) qualifications).

**Table A1 ISCED levels of education and associated awards and award levels**

ISCED 2011 Level	Corresponds to:	Typical award	Award NFQ Level
0 Pre-primary education	Early Start and other pre-primary	QQI Certificate	Level 1/2
1 Primary education	Primary education		
2 Lower secondary	2nd level education – Junior Cycle	Junior Certificate	Level 3
3 Upper secondary	2nd level education – Senior Cycle	Leaving Certificate	Level 4
			Level 5
4 Post-secondary non-tertiary	Craft apprenticeship, PLC courses, other FET <sup>31</sup>	QQI Level 5 Cert	Level 6
		QQI Advanced Certificate	
5 Short-cycle tertiary education	Third level – higher cert./university diploma /new post 2016 apprenticeship	Higher Certificate	Level 6
6 Bachelors degree or equivalent	Third level – ordinary & honours bachelor degree Higher diploma New post-2016 apprenticeship	Ordinary Degree	Level 7
		Honours Degree	Level 8
		Higher Diploma	Level 8
7 Masters degree or equivalent	Third level – master's degree, postgrad. certs./diplomas new post -2016 apprenticeship	Postgraduate Diploma Master's degree	Level 9
8 Doctor or equivalent	PhD	PhD	Level 10

<sup>31</sup> Some FET programmes (e.g. some specific skills training) also lead to awards at level 3 or 4 on the NFQ.

## Private independent colleges whose learners received QQI-HE awards in 2022

Dublin Business School

Griffith College

National College of Ireland

Hibernia College

CCT College Dublin

Dorset College

IICP Education and Training Limited

Irish College of Humanities and Applied Sciences Limited

Carlow College, St. Patrick's

Independent Colleges

Saint Nicholas Montessori College Ireland

ICD Business School

The Open Training College

Children's Therapy Centre

Setanta College

Galway Business School

International College for Personal and Professional Development

The American College, Dublin

Gaelchultúr

Dublin Institute of Design

Clanwilliam Institute

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