



Gyrfa Cymru
Careers Wales



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Graduate Opportunities in Wales





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1. Key Data for Wales



Over **40%**
of young people go
on to higher
education



21,400



degrees awarded



41%
of graduates
employed in
Health and
Education

23,090
Postgraduates in
2022

149,000
HE enrolments
in 2022



71%
work in Wales
after graduation



500+
Welsh medium
degrees

Key Data for Wales

95% of new
jobs by 2035 will
be at graduate
level



15,500+
Open
University
students



Average salary

£27,340



Graduates earn
21%



2. Introduction

According to the [Jobs of the Future](#) report by UK Universities, the Organisation for Economic Co-operation and Development (OECD) finds that 26% of UK workers are underqualified for the role they are in (as opposed to 14.5% who are overqualified), the third highest in the OECD behind Ireland and New Zealand.

'Underqualification can lead to underperformance in job roles, lower productivity and lower job satisfaction.' [Jobs of the Future](#)

The Census 2021 shows that approximately 1.37 million people were in employment in Wales and the latest [Annual Population Survey](#) reported that 38.6% of working age adults in Wales hold at least a level 4 or above qualification (equivalent to a degree or higher). This is below England at 47.1% and Scotland being the highest UK nation at 55.9%.

Over the last 5 years, there has been an increase of 5,735 graduates from Welsh universities (first degree and postgraduates) potentially entering the labour market in Wales, or further afield. However, this trajectory will need to continue increasing for Wales to reach the [Jobs of the Future projections that](#) 95% of new jobs in Wales by 2035 will be at graduate level, the highest of the four UK nations. In this report, we have examined various research and data available to summarise the current landscape and trends for graduates in Wales.

3. Overview of Higher Education in Wales

In 2022, around 149,000 students enrolled at the nine [Welsh Universities](#), including around 25,000 international students, drawn from 132 countries. According to [Study In Wales](#), they're attracted by a culture of excellence in both teaching and research.

There are over 500 degree courses taught through the medium of Welsh and over 2,000 undergraduate degree courses available in Welsh Universities, not including over 200 courses offered by the Open University.

The [Open University](#) have over 15,500 students across Wales and is the largest provider of part time undergraduate higher education in Wales. Over 139 businesses in Wales are sponsoring an employee with the Open University.

Three of Wales' nine universities feature in the top 500 of the *Times Higher Education* World University Rankings 2022. In the last 'Whatuni Student Choice Awards', four of the places in the UK top ten – including the number-one spot – were taken by Welsh universities.



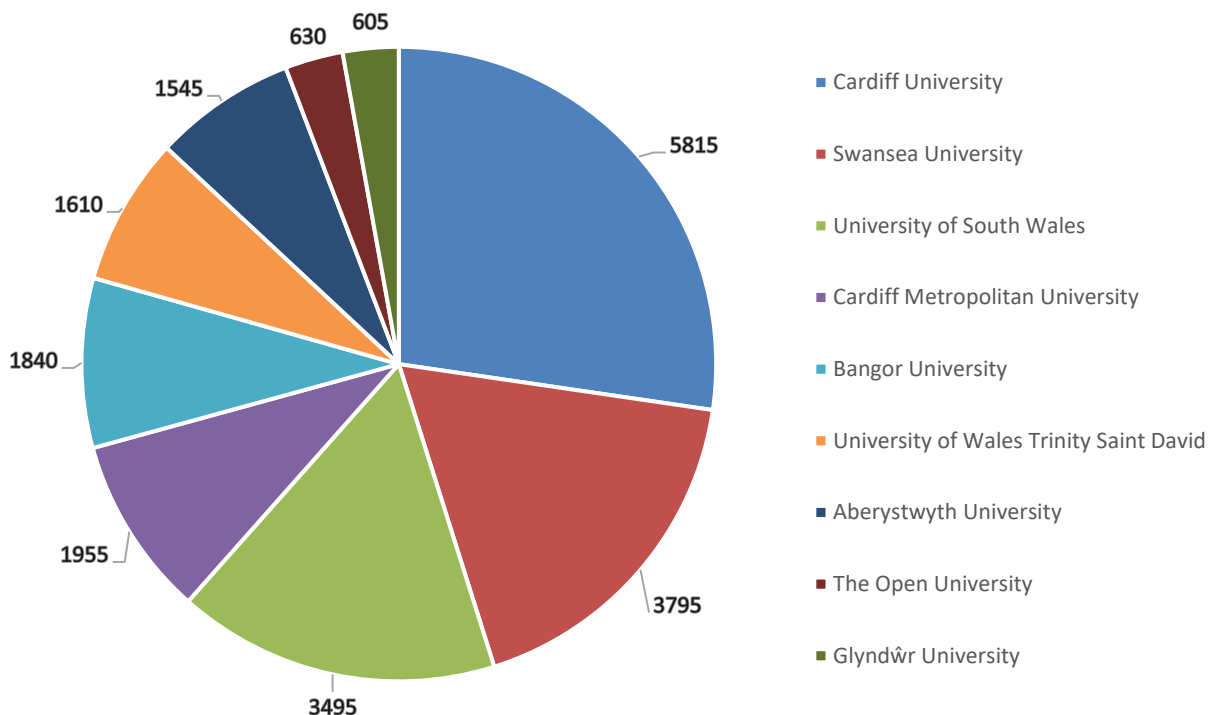
4. Key Headlines

The Higher Education Statistical Authority ([HESA](#)) collects and publishes data on higher education in the UK, including information on graduate destinations and employment outcomes. The latest data relating to higher education in Wales shows that:

- Enrolments to higher education qualifications in Wales have increased by 10% since 2017.
- Post graduate study has seen a higher increase of 27% since 2017, reaching 23,090 enrolments in Wales in 2022.
- 21,400 students gained a first degree and 16,210 gained a post graduate qualification from higher education providers in Wales in 2022.
- In 2022, 9,795 were Welsh domiciled students, living and studying in Wales.
- 71% of Welsh domiciled graduates returned or remained working in Wales after graduation.
- The higher education sector in Wales provides 37,000 jobs and delivers £4.4 billion in economic impact for Wales [London Economics UK Universities 2023](#)

5. Higher Education Institutions in Wales

First Degree qualifications gained from Higher Education in Wales 2022

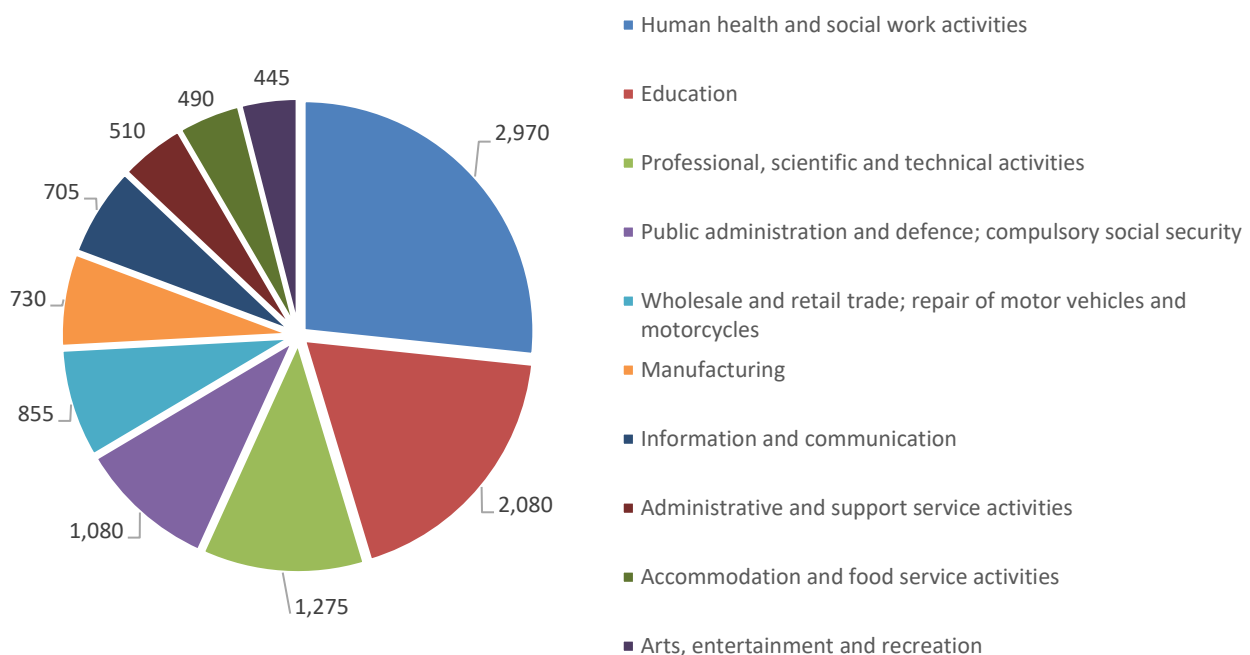


6. Thriving industries for graduates in Wales

The HESA data provides insights into the number of graduates finding employment and the industries they enter.

Wales is amongst the highest UK nation where graduates either remain or return to Wales to work. 71% of graduates who were domiciled in Wales, attended higher education in Wales and continued working in Wales in 2021. This was the second highest of the UK nations at 6,080. The number of graduates who lived in Wales, received their higher education in Wales and then moved out of Wales to work in 2021 was low, at 1,025.

Industries employing highest number of graduates in Wales, 2021



[Standard industrial classification of graduates entering work in the UK by provider | HESA](#)

Pie Chart 2 shows 10 industries that employed the highest number of graduates in Wales in 2021. Other industries, employing less than 400 graduates in Wales are Financial, Construction, Transport and Logistics, Real Estate, Water and Waste, Electricity and Gas, Agriculture, Forestry and Fishing, Mining and Quarrying.

In terms of the level of jobs that graduates enter across all industries, the last [Census data 2021](#) reported that of the people employed in Wales:

- 10.5% were in Managerial, Director or Senior Official jobs
- 18.2% were in Professional Occupations
- 11.8% were in Associate Professional and Technical Occupations

These are the three job groups where a higher-level skills or education (i.e. Level 4 and above) would be typically required and expected in the role. More people were employed in these three categories of occupations compared with any other broad categories in Wales, approximately 554,000 people. However, there is a shortage of higher-level skills to meet the number of vacancies,

‘Across the UK there remains almost one million more professional jobs than workers with degrees to fill them.’

[Universities UK](#)



According to Lightcast™ analytics, across all online job postings advertised in Wales in the 6 months, March-August 2023, there were 17,497 postings with specific reference to a degree qualification or higher needed for the role.

Graduates are employed across all industries and sectors and there are variations within the sectors. For example, 65.8% of workers in the pharmaceutical industry hold higher education qualifications, over double that of the manufacturing sector as a whole (32.4%).

It's not surprising that we see the highest number of graduates entering the [Health](#) sector, since 9% people in Wales are employed in the healthcare industry. 41% of graduates in Wales in 2021 entered work in the Health and Education sectors.

It's hard to tell whether a graduate is in a graduate job. For some jobs, a degree is the only route into employment.

'A proportion of graduates do not secure graduate-level work early in their career. This does not mean that this proportion of graduates will never get a 'good job'. Most graduates are in jobs for which a degree is an appropriate qualification.'

[Universities UK](#)



7. Skills in Demand

Having a degree shows employers that graduates have certain highly sought-after qualities which can help prepare them for work. A degree widens labour market options available to graduates compared to non-graduates.

'In the UK, the degree subject matters less. Many employers are looking for well-rounded graduates with transferable skills, rather than specific degree subjects.' [Universities UK](#)

It's often the experience of higher education that shapes a graduate and where soft, general or transferrable skills and work experience should not be underestimated. Many people who access higher education will take different routes to getting a higher-level qualification, and this is valuable to build a diverse skill set from various life and work experiences.

'Many fresh graduates who are actively applying for a job may not be successful due to their lack of soft skills.'
[Top Universities](#)

The UK's [Unit for Future Skills](#) employment and demand projections indicate that:

- 95% of new jobs by 2035 will be at graduate level in Wales
- 402,825 graduates will be needed in Wales to fill roles by 2035
- Six in 10 (61%) FTSE350 leaders say creative thinkers are essential to making the most of new AI tools
- 51% FTSE350 leaders say graduates with critical thinking skills would be more important to the workforce than ever if AI were to be used to automate more 'white-collar' jobs
- 50% FTSE350 leaders believe arts and humanities graduates will be crucial to helping businesses get the most out of AI tools.
- 63% said that businesses will need to work more closely with UK universities to develop a talent pipeline with their required skills
- 52% FTSE350 leaders say UK businesses will need to rely more heavily on UK university graduates to respond to skills gaps and workforce challenges of the future

The [Busting graduate job myths report](#) in 2022 states that future demand for graduate skills looks strong - a recent analysis by PWC suggests that Artificial Intelligence will increase demand for graduates by about 10% with those in healthcare, IT, and marketing in greatest demand.



8. Graduate Recruitment Schemes

A graduate recruitment scheme is only one route into employment.

A graduate scheme offers an entry level job with an employer that offers new graduates a structured training programme, often having a broad experience and placement in different departments across a larger organisation. These positions often enable fast progression on to management or professional roles with higher salaries.

Traditionally, it's large employers that offer structured graduate schemes. These employers may attend 'careers fairs' arranged by Universities, sometimes known as a '[Milkround](#)' events. Applications for graduate schemes can usually start early in the last year of final study. Graduate schemes are not just in private companies, they also exist in the public sector, for example in local authorities, Civil Service and the NHS.

Here is a selection of various graduate schemes that operate in Wales and across the UK.

Industry sector outlook for graduates	Sample of graduate Schemes
<p>Retail</p> <p>The wholesale and retail trade; repair of motor vehicles and motorcycles sector employs 4.2 million workers in England and Wales. This is 15.0% of the total workforce and the highest of all industrial sectors.</p> <p>Across England and Wales, 26.7% of workers in this sector hold higher education qualifications.</p> <p>The occupations with the highest proportion of workers with higher education qualifications in the wholesale and retail sector are optometrists (95.6%) and chartered and certified accountants (92.8%).</p>	<p>Early Careers - Dunelm Careers</p> <p>Aldi Graduate Area Manager Programme</p> <p>Morrisons Careers - Graduates</p>
<p>Financial</p> <p>Accounting and professional services companies are expected to be the largest graduate recruiters in 2023, with 7,610 vacancies Graduate Market Report 2023.</p> <p>Across England and Wales, 56.8% of workers in the finance and insurance sector hold higher education qualifications.</p> <p>The occupations with the highest proportion of workers with higher education qualifications in the finance and insurance sector are solicitors and lawyers (97.1%) and actuaries, economists and statisticians (95.7%).</p>	<p>Buzzwales Welsh Financial Services Graduate Programme</p> <p>Graduate Scheme Audit Wales</p> <p>Admiral Careers</p>
<p>Digital</p> <p>Due to AI, there will be a 10% increase in jobs that require a degree or equivalent in the next 20 years.</p> <p>Computer programming is the occupation that is expected to grow</p>	<p>Buzzwales Fast Track Data/AI Graduate Programme</p>



Industry sector outlook for graduates	Sample of graduate Schemes
<p>the most by 2035 in the UK Jobs of the Future</p> <p>Cardiff's information and communication industry has a slightly higher proportion of its workers having higher education qualifications, 70.9%. The BBC has their headquarters in the city centre and is the third-largest media cluster in the UK.</p> <p>50% FTSE350 leaders believe arts and humanities graduates will be crucial to helping businesses get the most out of AI tools. Jobs of the Future</p>	<p>Capgemini Graduate Programme</p> <p>Deloitte UK Cyber Graduate Programme</p>
<p>Health</p> <p>The UK will need over 1.2 million health and social care associate professionals including opticians, medical technicians, housing officers and youth and community workers by 2035. Jobs of the Future</p> <p>Jobs in Health Future Jobs Wales - Careers Wales</p>	<p>NHS Wales Graduate Management Scheme</p>
<p>Public Services</p> <p>According to Public Sector Employment data, there were 323,000 people employed in the public sector in Wales in March 2023, up by 7,000 (2.1%) from a year earlier. This is 10.4% of the population compared to a UK average of 8.7% employed in the public sector.</p> <p>The UK will need 1 million teaching and educational professionals such as lecturers, teachers and trainers by 2035.</p> <p>Education was the most popular sector chosen by graduates from all humanities subjects in the Graduate Outcomes survey.</p>	<p>Civil Service Fast Stream</p> <p>Academi Wales Public Service Graduate Programme</p> <p>Welsh Water Graduate Programme</p> <p>Transport for Wales Graduate Scheme</p>
<p>Tourism and Leisure</p> <p>The occupations with the highest proportion of workers with higher education qualifications in the arts, entertainment and recreation sector are chartered and certified accountants (93.5%) and archivists and curators (91.4%).</p> <p>The sector employs highly skilled and qualified people in roles such as conservation, accounting, HR, marketing, solicitors and business managers.</p>	<p>Graduate Employment with Trailfinders</p> <p>Graduate Management Programme 2023 Hollywood Bowl Group</p>
<p>STEM</p> <p>The UK will need over 1.9 million STEM professionals in areas such as computing and engineering by 2035. Computer programming is the occupation that is expected to</p>	<p>Atkins Graduate Development Programme</p>

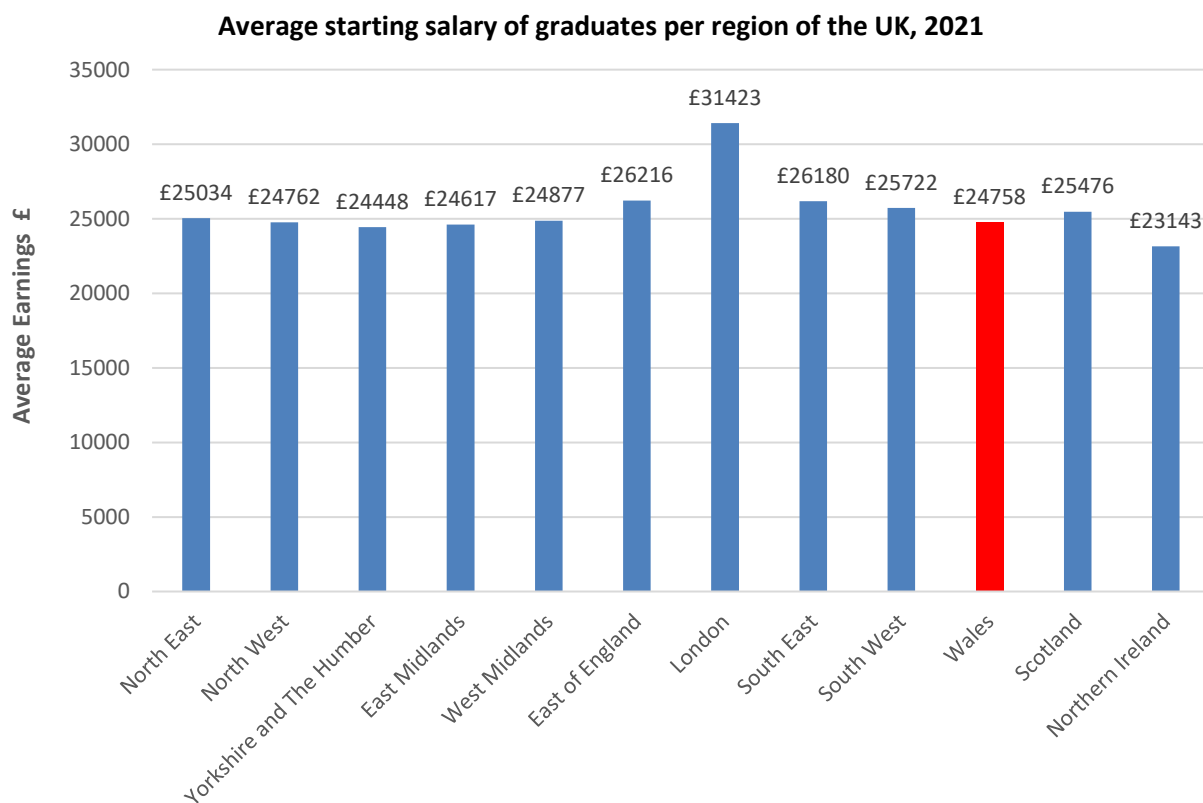


Industry sector outlook for graduates	Sample of graduate Schemes
<p>grow the most by 2035 in the UK.</p> <p>Due to AI, there will be a 10% increase in jobs that require a degree or equivalent in the next 20 years. Jobs of the Future</p> <p>The professional and scientific, information and communication, and education sectors have the most highly qualified workforces ONS:Census 2021</p>	<p>Careers at Sterling Pharma Solutions</p> <p>Graduates Airbus</p>
<p>Food and Farming</p> <p>Across England and Wales, 23.4% of workers in agriculture, forestry and fishing hold higher education qualifications. Powys (9.4%) and Eden (9.1%) are the two local authorities employing the highest percentage of workers in the agriculture sector.</p> <p>There is a merger of skills and technologies in the food and farming sector with STEM and digital playing a key role in expanding Agri-tech roles.</p>	<p>Dunbia Graduate Programme</p> <p>Management Development Services Graduate Scheme</p>
<p>Manufacturing and Engineering</p> <p>Approximately 17% of the UK engineering workforce are in Wales.</p> <p>34% of UKs engineering workforce have a degree qualification and of these, 52% are female.</p> <p>The UK will need over 1.9 million STEM professionals in areas such as computing and engineering by 2035.</p> <p>Graduates from technology and engineering disciplines have higher full-time employment rates than the all-graduate average. What do graduates do?</p> <p>Jobs in Energy Future Jobs Wales - Careers Wales</p>	<p>Program for Graduates - Celsa Group</p> <p>Find a graduate scheme - Institution of Mechanical Engineers</p> <p>Engineering graduate scheme EDF (edfenergy.com)</p>
<p>Construction</p> <p>There are 100,688 people employed in the Construction industry in Wales, approximately 7% of the workforce.</p> <p>There is high demand for workers with digital and green skills to design and build greener, more sustainable buildings.</p> <p>Jobs in Construction Future Jobs Wales- Careers Wales</p>	<p>Adra social housing - graduate scheme - North Wales</p> <p>Redrow: Construction Graduates</p>

9. Graduate Salaries

Institute of Student Employers (ISE) research indicates that the average graduate salary in the UK is currently at £33,229. Often, UK average salaries are inflated when including London. However, with ISE research primarily focusing on large businesses and graduate schemes, this figure is significantly higher than the average graduate salary reported by the Higher Education Statistics Agency (HESA).

According to [data](#) from HESA's most recent Graduate Outcomes survey of 2020/21, the average salary reported by first-degree graduates in full-time employment was **£27,340**, fifteen months after graduation. Table 3 below shows the average starting salaries of graduates across the different regions of the UK. The average graduate starting salary in Wales is 9% below the UK average. However, Wales is faring well compared to other UK regions, apart from London, which is inflating the UK average.



[Prospects](#) have analysed how graduate salaries vary by degree subject and as seen in previous years, Medicine and Dentistry graduates reported higher earnings than any other graduates by some margin 15 months after graduation. Medicine and Dentistry graduates earn upward of £40,000 a year on average. This is followed by Economics graduates who reported average starting salaries of £33,483 when surveyed.

Conversely, Creative arts degrees were associated with the lowest average returns among this cohort with Cinematics and Photography, Art, Design and Performing arts graduates all among the lowest earners on average.

According to the Institute of Student Employers recent [report](#), the graduates of 2023 are less attracted to big names and fast growing companies and taking a more holistic view of location and wider terms and conditions of employment.



A [Prospects](#) report noted that only 3% of Graduate Outcomes respondents working within the UK said that the main reason for taking their job was because it pays well, suggesting that high pay isn't always the most crucial factor when planning their career.

The graduates who stayed in Wales to work scored 4.1 (out of 5) for 'fair work' according to HESAs survey. 'Stayers' in Scotland, Wales, and Northern Ireland, have high fair work scores when compared to many other regions of the UK. HESAs fair work criteria is based on three key questions:

1. My current work is meaningful
2. My current work fits with my future plans
3. I am utilising what I learnt during my studies in my current work

10. What do graduates and employers say about the value of their qualification?

The latest research from Universities UK based on 3,500 graduates and 3,500 business leaders highlights the value of going to university, as follows:

- 74% of Welsh graduates say they found a job reflective of ambitions in under a year, thanks to their university education
- 56% of Welsh graduates say that going to university has improved their job security
- 75% of Welsh graduates say the support they received at university helped them gain employment
- 98% of Welsh business leaders polled revealed that graduates reach managerial positions faster, as a result of going to university
- 73% of Welsh business leaders believe that going to university enables graduates to build crucial transferable skills
- 88% of business leaders in Wales would expect to see graduate employees earn more than non-graduates after three years in employment
- Employees who obtained a degree relevant to their role can expect to see an increase of 21% in their earnings



11. Conclusion

With 95% of new jobs by 2035 projected to be at graduate level in Wales and 402,825 graduates needed in Wales to fill roles by 2035, the higher education sector in Wales is in a strong position and the numbers entering higher education has been steadily increasing over the last 5 years.

With over 40% of young people in the UK currently going to higher education, over time, it looks likely that there will be a cohort of young people of which the majority will go through higher education.

According to [Universities UK](#), many critics of the current system suggest that it would be better for more people to achieve qualifications through routes other than the 'conventional' pathway of taking a traditional bachelor's degree at university directly from school, e.g. through degree apprenticeships or taking part time degrees later in life.

'The future is of an expanding graduate jobs market, at least in part because the flexibility and adaptability of UK graduates will remain a particular advantage in a rapidly changing employment climate.'

[Universities UK](#)

12. Further Information and Signposting

- [Graduate job websites - Careers Wales](#)
- [Options for graduates - Careers Wales](#)
- [Prospects - find and apply for a job](#)
- [UCAS - graduate jobs, internships and apprenticeships](#)
- [Welsh regional analysis - UCAS](#)
- [Graduate jobs in Wales - DWP- find a job](#)