2023

EMPLOYMENT OUTCOMES OF BACHELOR'S DEGREE GRADUATES OF CATALAN UNIVERSITIES

AQU CATALUNYA

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INTRODUCTION

This report presents the results of the eighth study on employment outcomes of bachelor's degree graduates of Catalan universities. As with previous reports, it provides data and other indicators that AQU Catalunya makes available to all stakeholders in the Catalan university system in order to encourage analysis and reflection on how to improve the bachelor's degrees in terms of graduates' employability and satisfaction with the education they received.

This latest report has once again benefited from the invaluable participation and support of the social councils of Catalonia's public and private universities, who consider this tool to be a crucial factor in promoting continuous improvement in the universities and their responsiveness to the needs of society.

The data in this report come from a survey that was successfully sent to more than 42,000 bachelor's degree graduates from the 2018-2019 and 2019-2020 cohorts (except for graduates in Medicine, for whom the 2015-2016 and 2016-2017 cohorts were surveyed).[1] Respondents were able to answer questions about the characteristics and quality of their employment, as well as their satisfaction with their education. More than 52% of the contacted population responded to the survey. Details on the sample can be found in the data sheet at the end of the report.

With the eight employment outcomes surveys conducted to date – six for the online university – we have collected more than 120,000 responses. This figure positions Catalonia as one of the European regions with the most extensive, complete and representative databases for this type of analysis.

The main results of our analysis are briefly summarised below:

> Ninety-one per cent of bachelor's degree graduates were working at the time of the survey, 0.8 percentage points higher than in the previous survey. This group has recovered from the downturn that accompanied the worst years of the financial crisis at the end of the 2000s and shows consistently high employment rates. According to the data, the economic strain caused by the COVID-19 health crisis has had no apparent impact on employment. What's more, the unemployment rate (5.5%) of the surveyed population is at its lowest since 2011 and is close to the so-called full employment threshold (5%).

> A large majority of employed bachelor's degree graduates perform degree-specific functions at work (72.5%). If we take into account those who perform university-level functions that are not specific to their degree, we find that almost 9 out of 10 bachelor's degree graduates are suitably qualified for their jobs. These figures are very similar to those found in the previous survey.

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[1] Bachelor's degree graduates from all Catalan universities, including the online university. It should be noted that graduates from the online university received a specific set of questions, as their admission profile tends to be different. More information on the survey fieldwork for the traditional universities and the online university can be found in the data sheet at the end of the report. There is also a special section specifically analysing the online university graduates.

Employment outcomes of bachelor's degree graduates from Catalan universities

> In terms of working conditions, there has been a marked improvement in contractual stability (7.7 percentage points), which is likely due to the 2022 labour reform. The overall job satisfaction of bachelor's degree graduates is high, with an average rating of 8 out of 10.

> The results vary considerably by field of knowledge. Humanities graduates have markedly weaker employment indicators (as do their Sciences counterparts in some cases), while those in Engineering have top scores across the board. However, employment (especially for graduates of bachelor's degrees in the subfield of Philosophy and History) and contractual stability have improved slightly overall in Humanities.

> With respect to income, bachelor's degree graduates have better inflation-adjusted salaries than in the worst years of the financial crisis, but their average purchasing power has diminished slightly since the last survey due to the high inflation rates of late. However, there are important differences between knowledge fields: Humanities graduates have an average gross monthly salary 810 euros lower than Engineering graduates.

> The results show a significant change in the pathway that bachelor's degree graduates took to find their first job. While personal and family contacts are still the main pathway, their importance has declined, with internships and websites such as LinkedIn and InfoJobs making up the difference.

> In terms of satisfaction, the percentage of graduates who would choose the same bachelor's degree again remains close to 70%, although there has been a slight decline (2.8 percentage points) compared to the last survey. However, there are graduates in certain subfields who are significantly less satisfied than their peers in 2020. Forty per cent of those who would not choose the same bachelor's degree again pointed to a lack of programme quality, which shows that there is room for improvement in course design and delivery.

> When asked about the skills they had acquired and how useful they were in the labour market, respondents cited a lack of English proficiency, followed by written expression, planning and organisation, and problem solving.

> The proportion of bachelor's degree graduates who pursue further studies continues to grow with each new survey: almost 6 out of 10 chose to study a postgraduate, master's or doctoral degree, more than four percentage points higher than in 2020.

> Finally, the admission profile of graduates from the online university has changed, consolidating a growing trend in recent years: there has been an increase in the proportion of new students coming from the University Entrance Examination (PAU) or from non-university post-compulsory education, and a decrease in the proportion of new students entering with a higher education degree. The employment rate of bachelor's degree graduates from the online university is very similar to that of graduates from traditional universities. They also have greater contractual stability and higher salaries on average, probably because they tend to be older, more senior

in their current jobs and more likely to have a higher education degree prior to their bachelor's degree.

This report is primarily based on information gathered through the graduate survey. In order to contextualise and benchmark the results, it also draws on data from the UNEIX Catalan University Information System, which is coordinated by the Secretariat for Universities and Research of the Government of Catalonia, and data from the Spanish National Statistics Institute (INE). We would like to thank these institutions for their collaboration, as well as the graduates who took part in the survey. Without their participation, this study would not have been possible.

We hope that this report will prove insightful to those wishing to gain a deeper understanding of the Catalan university system and its impact on the labour market. More importantly, we hope that the data and findings presented here will be used to improve the bachelor's degrees in Catalonia.

Jaume Valls Pasola, Director of AQU Catalunya

BACKGROUND DATA

Population data on Catalonia

> Trend in the number of bachelor's degree graduates in Catalonia

Figure 1. Trend in the number of bachelor's degree graduates by university type[2]
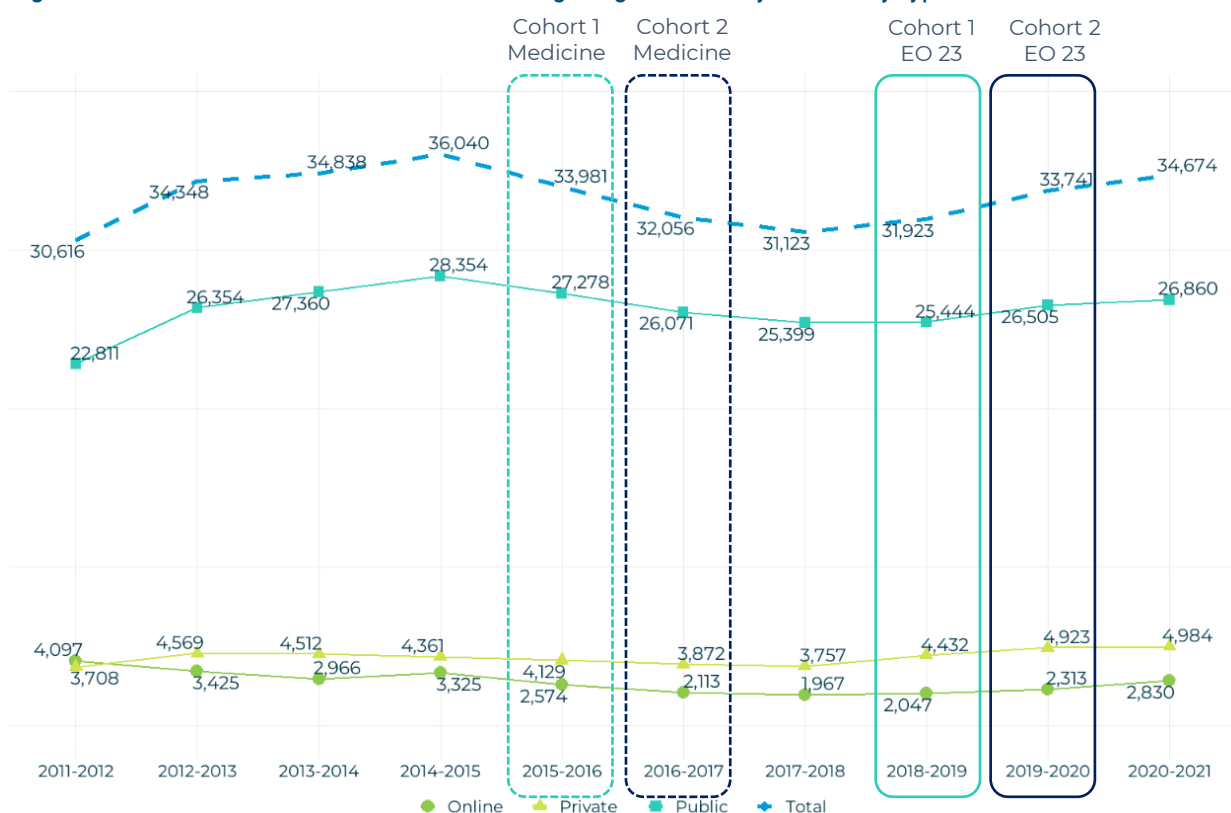
Note: the cohorts surveyed in the 2023 employment outcomes study (EO 23) are marked with a box. Cohort 2 (for Medicine and EO 23) was only surveyed for strata with a population of less than 65 graduates. For more information, see the technical report of the 2023 employment outcomes survey.

Source: UNEIX.

After four years of decline between the 2014–2015 and 2017–2018 academic years, the number of bachelor's degree graduates is approaching the figures observed in the 2013–2014 academic year

> Across all universities, the number of bachelor's degree graduates has risen from the all-time low in the 2017-2018 academic year, with private universities experiencing the largest relative increase.

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[2] UNEIX – the source of this data – has been compiling comprehensive data on the private universities and the online university since the 2011-2012 academic year. Affiliated centres come under the university to which they are affiliated.

> Seventy-seven per cent of bachelor's degree graduates in Catalonia studied at a public university. However, this proportion has fallen slightly since its all-time high in the 2017-2018 academic year, when 81.6% of graduates reported studying at a public university.

> Graduate distribution by field of knowledge

Figure 2. Graduate distribution by field of knowledge and gender (2018–2019 and 2019–2020 cohorts)
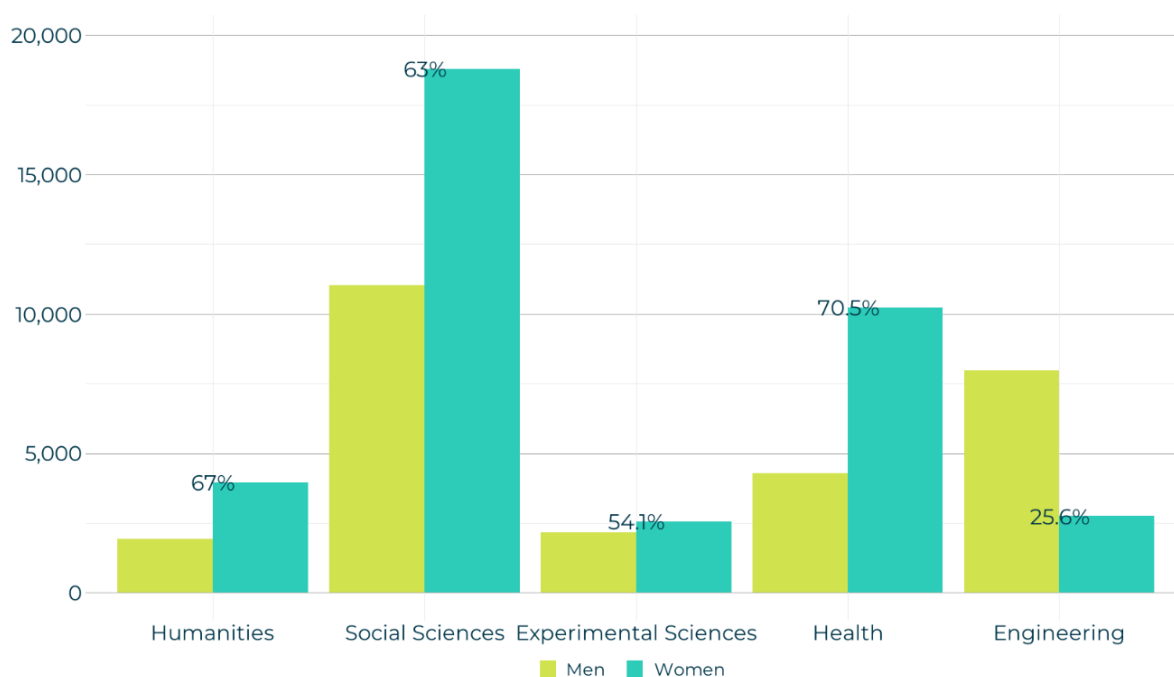
Note: percentages indicate the proportion of women in each field.

Source: UNEIX.

Women are in the majority in all fields of knowledge except Engineering, where they account for only a quarter of graduates

> Gender differences have remained marked and stable for at least the last decade. This can be explained by the phenomenon known as "horizontal segregation", which describes the choice of degree field as a function of gender, resulting in the most lucrative degrees being chosen mainly by men. These differences in choice may partly explain the pay gap among graduates of bachelor's degrees in the Catalan university system (AQU Catalunya, 2021).

Figure 3. Graduate distribution by field of knowledge and university type (2018–2019 and 2019–2020 cohorts)

University type	Social Sciences	Humanities	Health	Experimental Sciences	Engineering
Public	41.6%	9.9%	21.2%	8.5%	18.8%
Private and online	59.7%	5.5%	25.7%		7.1%
Overall	45.4%	9%	22.1%	7.2%	16.3%

Legend: Engineering, Experimental Sciences, Health, Humanities, Social Sciences
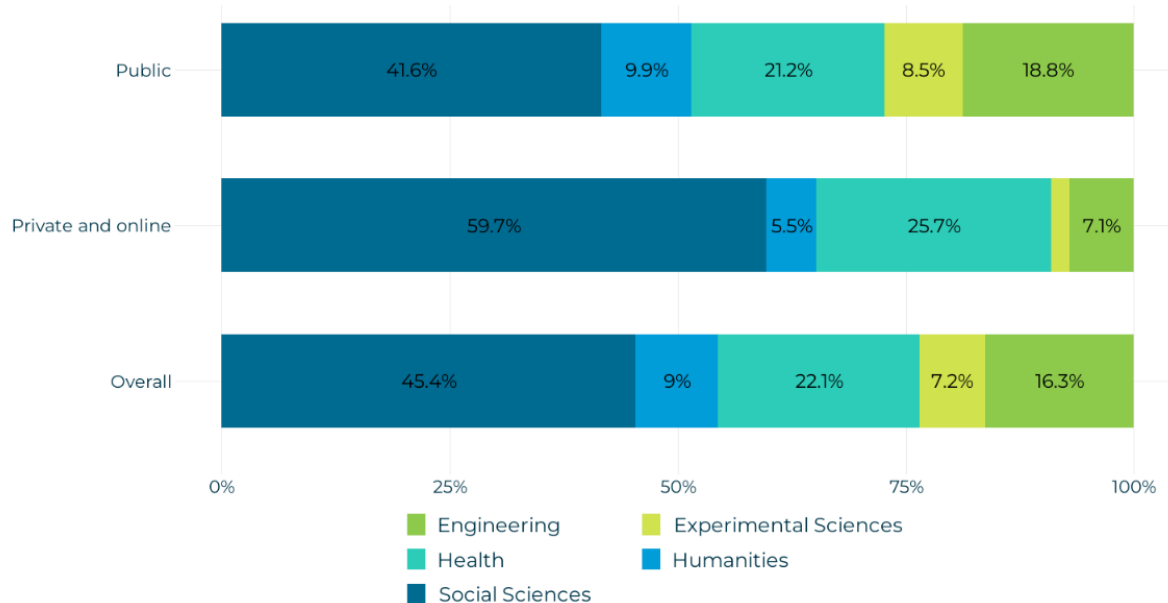
Source: UNEIX.

Figure 4. Graduate distribution by field of knowledge and level of education

Level	Social Sciences	Humanities	Health	Experimental Sciences	Engineering
Bachelor's	45.4%	9%	22.1%	7.2%	16.3%
Master's	58.1%	7.7%	12.9%	6.6%	14.7%
PhDs	18.8%	12.9%	30.2%	18.7%	19.3%

Legend: Engineering, Experimental Sciences, Health, Humanities, Social Sciences
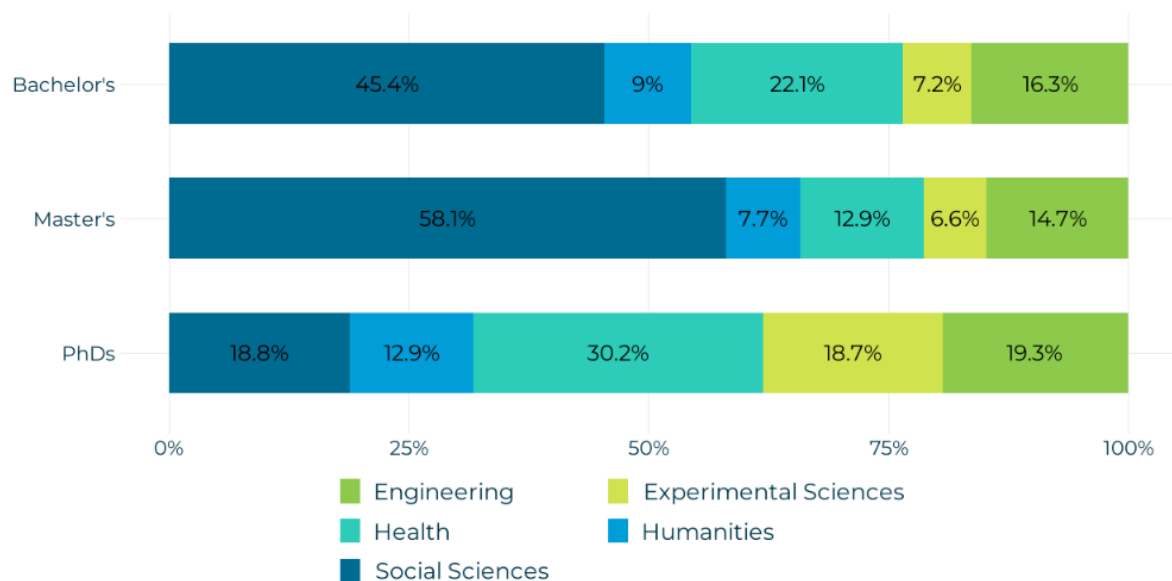
Note: the bachelor's degree study included the 2018-2019 and 2019-2020 graduate cohorts, whereas the master's degree and PhD studies included the 2017-2018 and 2018-2019 cohorts.

Source: UNEIX.

Almost half of all graduates are from the Social Sciences

> The proportion of graduates in this field is disproportionately high in the private universities and the online university.

> The relative proportion of Humanities, Engineering and Sciences graduates is higher in the public universities.

> At the bachelor's and master's degree level, the proportion of graduates is lower in Health and higher in Social Sciences, the opposite of what is observed at the PhD level.

> Nationality of bachelor's degree graduates[3]

Figure 5. Nationality of bachelor's degree graduates (2018–2019 and 2019–2020 cohorts)
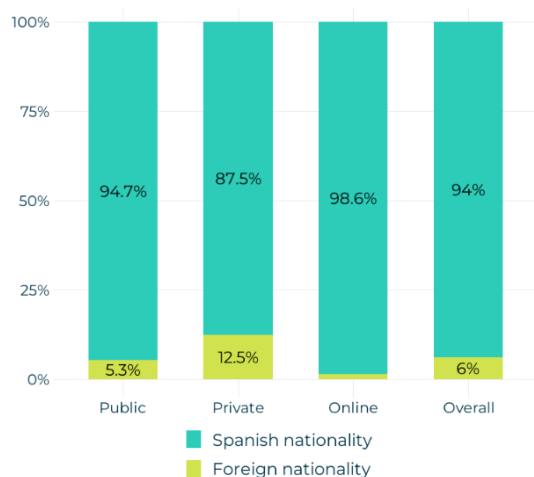
The vast majority of bachelor's degree graduates are of Spanish nationality, but the proportion of foreign graduates from private universities is disproportionately high

Source: UNEIX.

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[3] The figures in this section represent the nationality of graduates and therefore do not accurately reflect the number of international students graduating from Catalan universities. According to the OECD, international university students are those who received their prior education in another country and are not residents of their current country of study. In this regard, foreign graduates of bachelor's degrees in the Catalan university system could be residents in Spain or have been born in the country.

Figure 6. Foreign bachelor's degree graduates' place of origin (2018–2019 and 2019–2020 cohorts)

Place of origin	Value
European Union	2,058 (51.9%)
Rest of Europe	613 (15.4%)
South America	567 (14.3%)
Asia	354 (8.9%)
Africa	260 (6.6%)
Central America and the Caribbean	59 (1.5%)
North America	58 (1.5%)
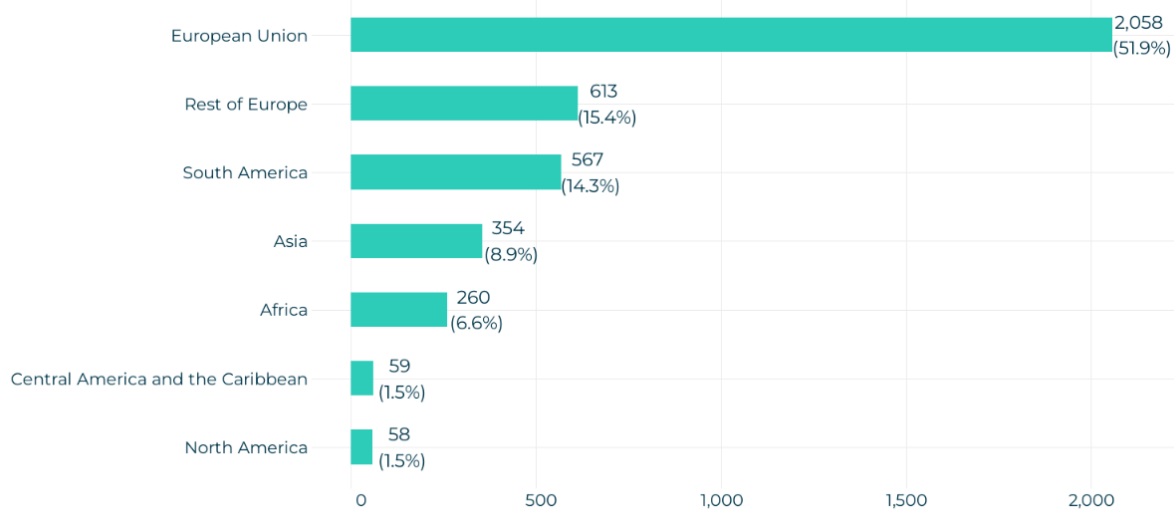
Source: UNEIX.

Most foreign bachelor's degree graduates are from the European Union (51.9%), followed by those with a passport from a non-EU country in Europe

> The countries accounting for the highest proportions of bachelor's degree graduates are France (30%), Andorra (7%), Italy (7%), Romania (6.4%) and China (5.6%).

Economically Active Population Survey (EAPS, Spain)

> Employment outcomes by level of education

Figure 7. Percentage of the active population employed or unemployed by level of education (people aged 25 to 44 – EAPS, 1st quarter 2023)
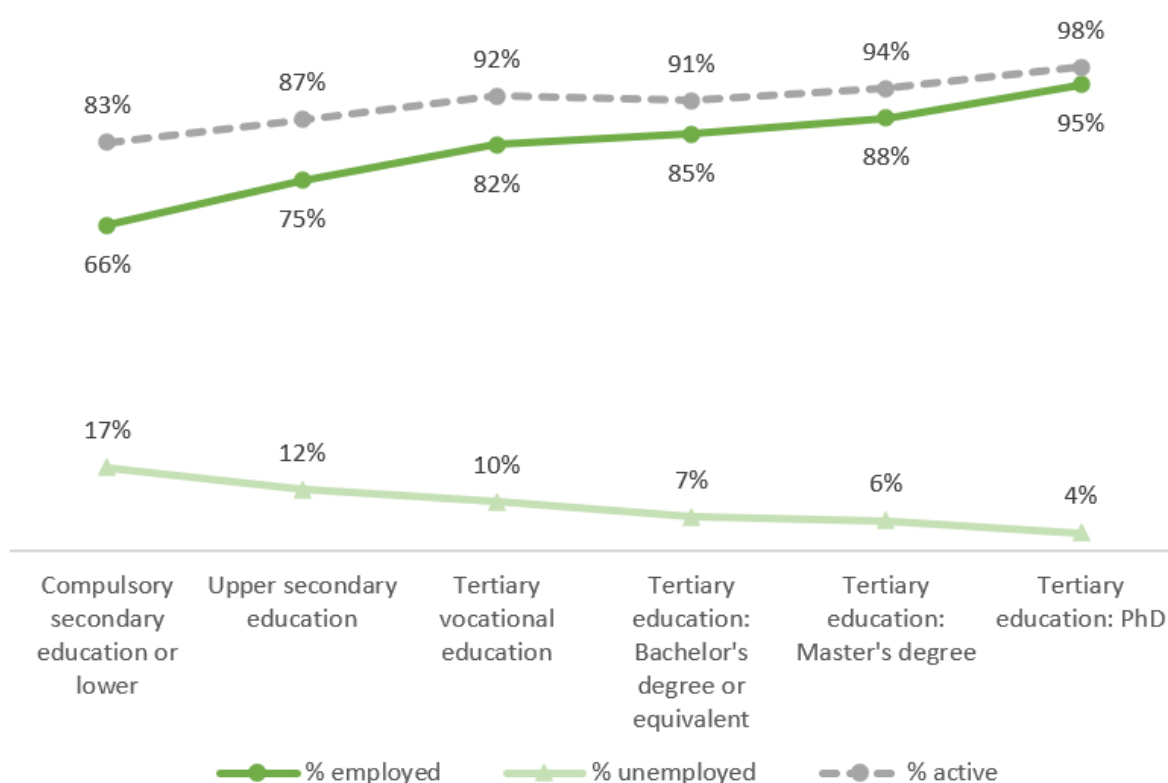
Note: each indicator is calculated with regard to the total population at each level of education.

Source: National Statistics Institute (INE).

The higher the education level, the better the employment outcomes

> Completing tertiary education (vocational or university courses) clearly improves access to the labour market and employment and thus provides better protection against unemployment.

> By international comparison, Spain had an employment rate of 81% for 25- to 64-year-olds with tertiary education in 2021. This compares with an EU22 average of 87% and an OECD average of 85%. This rate is also far below that of neighbouring countries such as France (86%) and Portugal (90%) (OECD, 2022). The percentages of the same indicator by level of education are as follows:

  o Bachelor's degree or equivalent: Spain 80%, EU22 84%.
  o Master's degree or equivalent: Spain 84%, EU22 89%.
  o PhD or equivalent: Spain 87%, EU22 93%.

> Employment and unemployment trends

Figure 8. Employment trend by level of education (people aged 25 to 44 – EAPS, 1st quarter 2023)
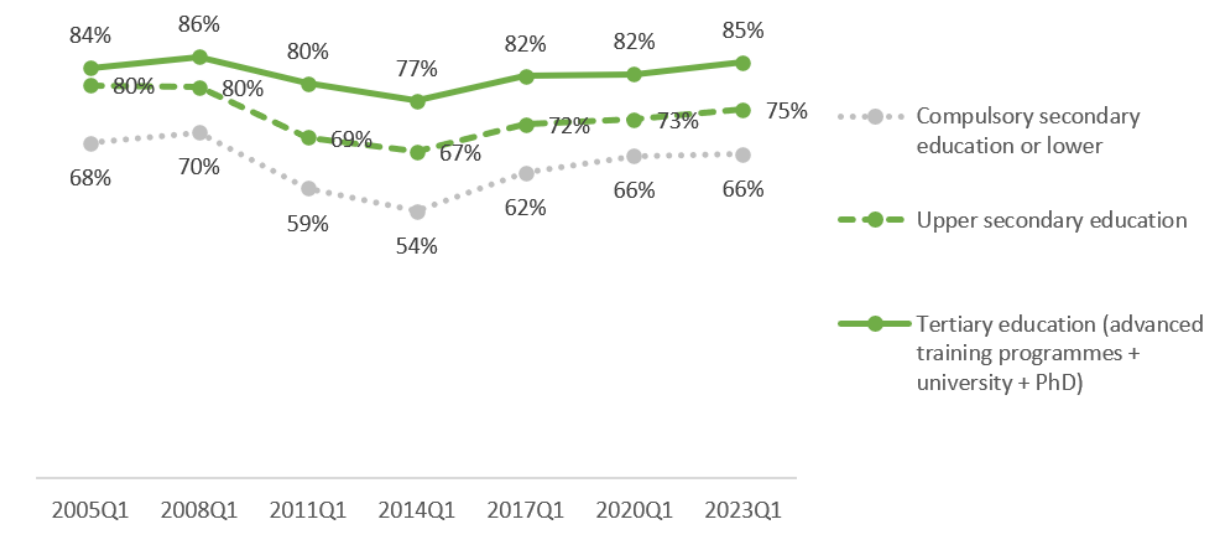
Source: National Statistics Institute (INE).

Figure 9. Unemployment trend by level of education (people aged 25 to 44 – EAPS, 1st quarter 2023)
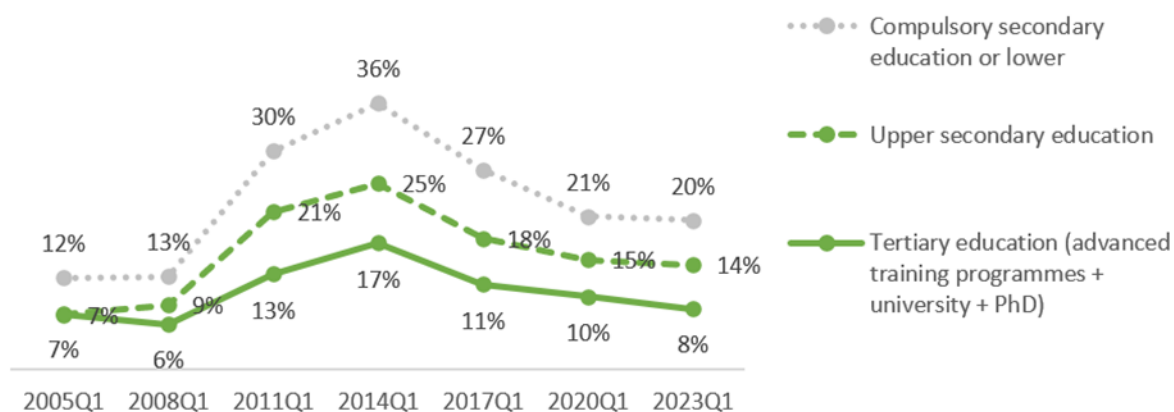
Note: the unemployment rate is the number of unemployed as a percentage of the total labour force.

Source: National Statistics Institute (INE).

Over the last three years, the employment rate of people with upper secondary and tertiary education has risen slightly and the corresponding unemployment rate has fallen

> The employment rate of tertiary educated people is 85% (three percentage points higher than in 2020), while the unemployment rate is 8% (two percentage points lower than in 2020).

> The distance between unemployment rates by level of education has remained relatively constant since 2020, and is still much wider than the minimal differences observed before the economic crisis. However, the unemployment rate for tertiary educated people has nearly returned to pre-crisis levels.

SURVEY ON EMPLOYMENT OUTCOMES OF BACHELOR'S DEGREE GRADUATES

Employment status

> Employment

Figure 10. Trend in the employment, unemployment and inactivity rates of bachelor's degree graduates
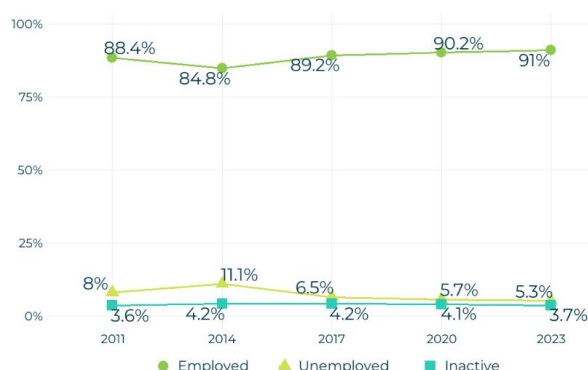
Figure 11. Overall employment rates and increase between 2020 and 2023 by field of knowledge

Figure 12. Employment trend by broadened subfield (2020–2023)

Note: the vertical lines represent the overall percentages for the year. The number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

Ninety-one per cent of bachelor's degree graduates were working at the time of the survey

> Employment is on an upward trend, recovering from the decline in the worst years of the 2008 financial crisis.

> The data show that the economic strain caused by the health crisis had no apparent impact on employment. Three years on, the figures are back to where they were before.

> Employment has increased in almost all subfields since 2020, particularly in Philosophy and History; Biological and Earth Sciences; and Architecture, Construction and Civil Engineering.

Figure 13. Employment rate by field of knowledge in 2023 (maximum and minimum specific subfield shown for each field)
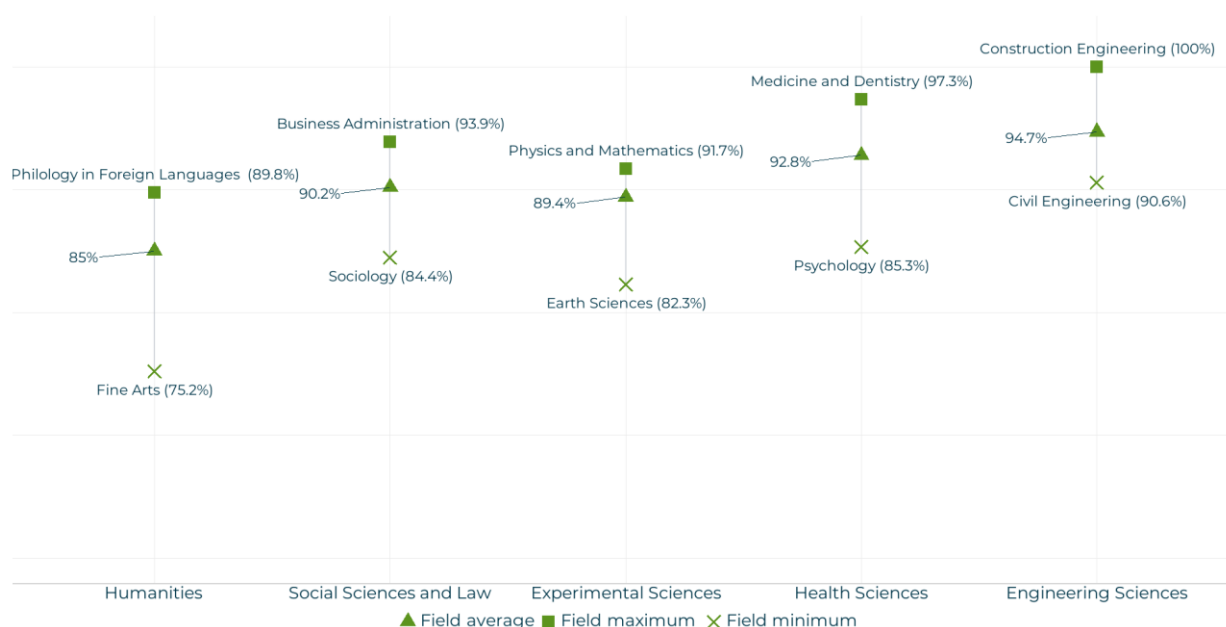
Engineering has the highest employment rate, followed by Health and Social Sciences

> Humanities differs the most from the other knowledge fields, coming in six points under the overall average.

> However, there is substantial variation within each field. For example, the employment rate among graduates of bachelor's degrees in Earth Sciences (the lowest in Sciences) is below the average employment rate for Humanities.

> Engineering and Sciences have the smallest internal employment gaps. The gap is widest in Humanities, with employment rates ranging from 89.8% in Foreign Languages and Literature to 75.2% in Fine Arts.

> Unemployment characteristics

Figure 14. Unemployment trend of bachelor's degree graduates
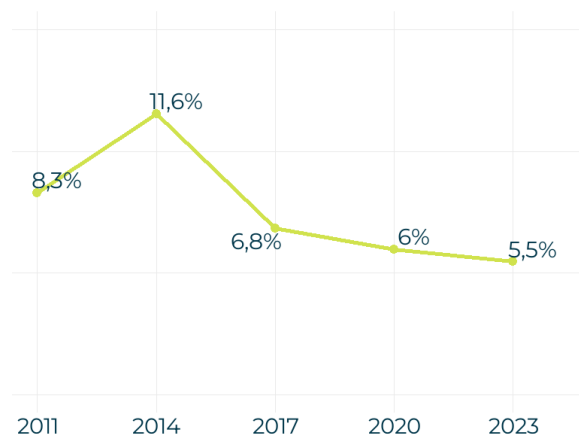
- 8,3% (2011)
- 11,6%
- 6,8%
- 6%
- 5,5% (2023)

2011 2014 2017 2020 2023

Note: the unemployment rate is the number of unemployed as a percentage of the total labour force.

The unemployment rate is close to the so-called full employment threshold (5%)

> The unemployment rate is far below the 9.3% for the Catalan population aged 25 to 54 as a whole (Idescat, 1st quarter 2023).

> Of the low proportion of bachelor's degree graduates who are looking for work (*n* = 1,097), most have been doing so for less than six months.

Figure 15. Trend in the amount of time spent unemployed (as percentages of the unemployed population)

- 65.5%
- 49.8%
- 67.1%
- 75.1%
- 70.7%
- 21.9%
- 30.1%
- 20%
- 17.3%
- 16.4%
- 15.3%
- 12.6%
- 15.6%
- 8.4%
- 14%

2011 2014 2017 2020 2023

● Less than 6 months   ▲ Between 6 months and 1 year   ■ More than 1 year
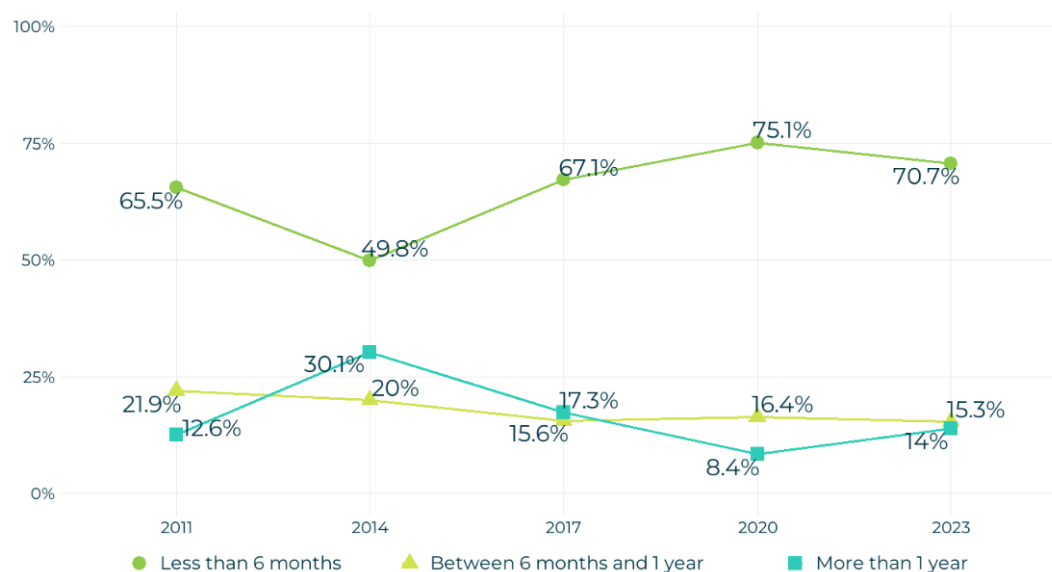
> Employment sector

Figure 16. Employment trend in the public and private sectors
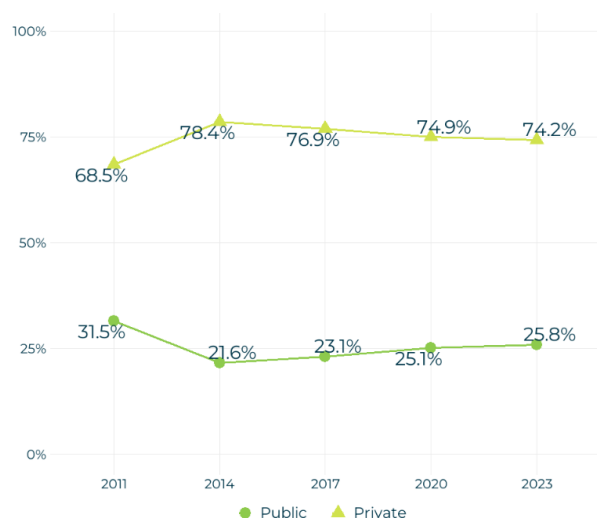
Slight increase in public sector employment, although not yet back to levels seen before the worst years of the financial crisis that began in 2008[4]

> This is higher than the 16.3% of the total Catalan workforce employed in the public sector.[5]

> There has been a significant increase in public employment for graduates with bachelor's degrees in Medicine and Biomedical Sciences, exceeding 50% in 2023. The increased recruitment of health professionals during the health crisis may explain this change.
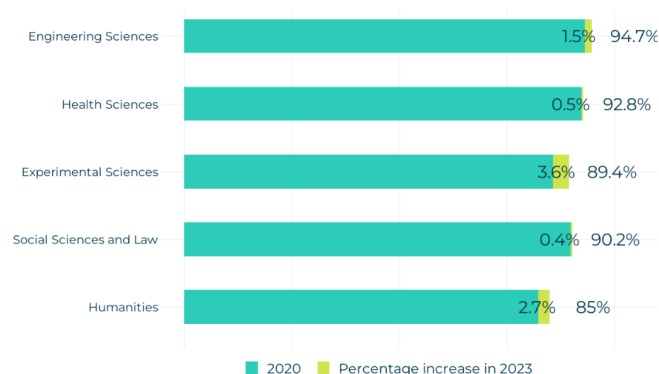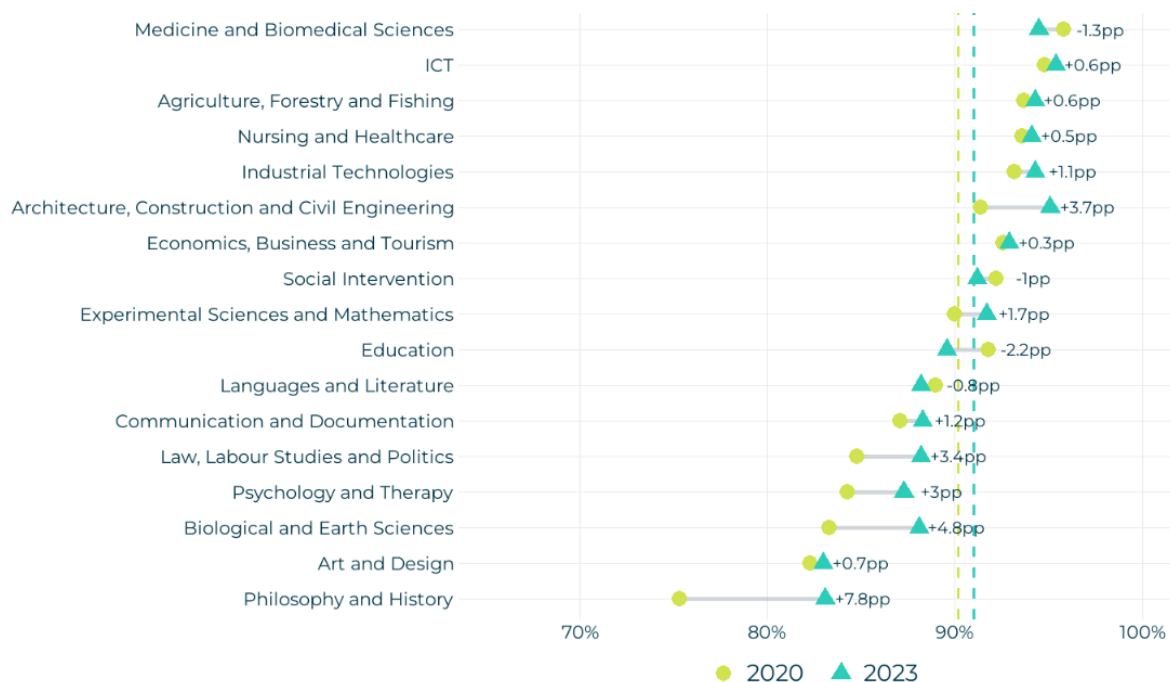
Figure 17. Public employment trend by broadened subfield (2020–2023)
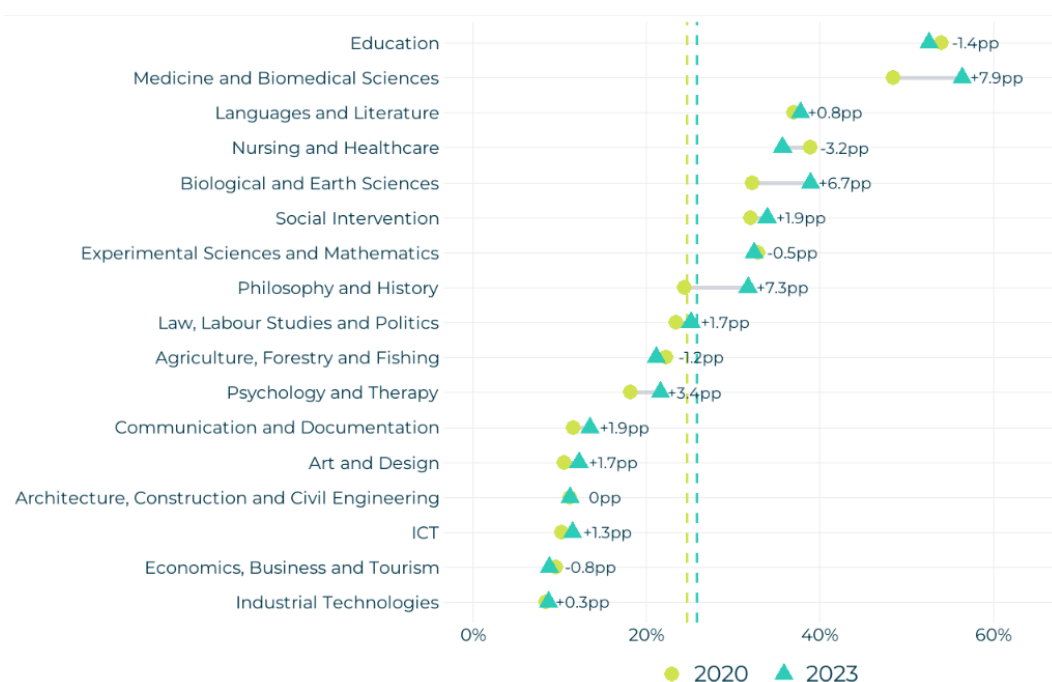

Note: the vertical lines represent the overall percentages for the year. The number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

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[4] Also known as the Great Recession, the financial crisis led to a decline in public employment, especially after 2011 when state legislation to reduce public spending intensified (Longo et al., 2017).

[5] Data for the first quarter of 2023 published by Idescat based on data from the INE's Economically Active Population Survey.

Figure 18. Distribution of employed bachelor's degree graduates by economic sector and field of knowledge (2023)

Branca	Humanities	Social Sciences and Law	Experimental Sciences	Health Sciences	Engineering Sciences	Global
Production of raw materials and energy	0.5%	1.1%	2.0%	0.2%	3.5%	1.5%
Industry	5.7%	6.9%	21.2%	4.3%	31.5%	12.7%
Construction	1.8%	1.1%	1.2%	0.3%	11.1%	3.1%
Consumer Services	16.9%	14.4%	5.4%	8.1%	8.7%	11.4%
Communication Technologies	4.9%	3.5%	2.6%	0.6%	8.5%	4.0%
Information and communication	4.3%	5.6%	0.8%	0.3%	1.8%	3.2%
Financial inst., insurance, real estate	1.7%	6.4%	2.1%	0.5%	2.2%	3.5%
Business services	11.4%	19.1%	12.3%	2.9%	17.7%	14.2%
Public administration	6.4%	10.5%	6.5%	4.6%	3.7%	7.1%
Education, culture and research	43.3%	23.3%	33.4%	9.5%	7.9%	20.2%
Health and social care	3.0%	8.1%	12.5%	68.7%	3.4%	19.3%

As expected, graduates' distribution across economic sectors varies by field of knowledge

> However, the sector of education, culture and research accounts for a particularly large proportion of graduates in Humanities, Social Sciences and Sciences.

> Job suitability

Figure 19. Trend in the suitability of functions performed at work[6]

- Functions of the specific degree
- University functions
- Non-university functions
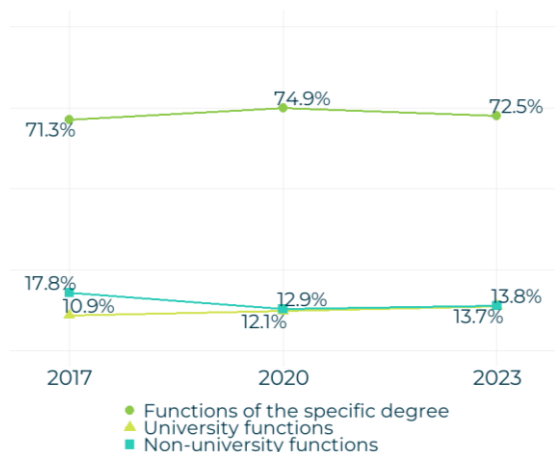
Figure 20. Functions performed at work by field of knowledge (2023)

- Functions of the specific degree
- University functions
- Non-university functions

....
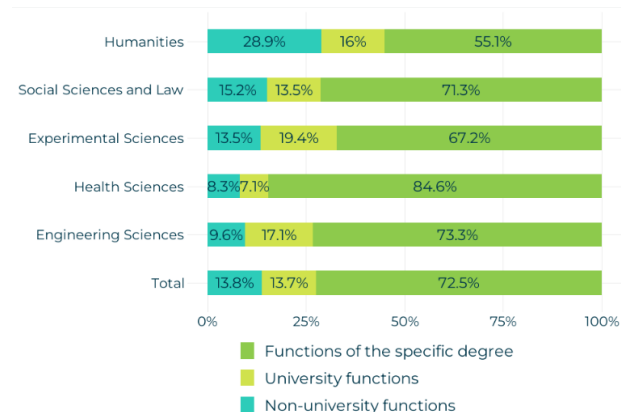
More than 7 out of 10 graduates perform functions specific to their bachelor's degree

> With a slight decrease of 2.4 percentage points, the proportion is almost the same as in 2020. The type of work that bachelor's degree graduates do is highly aligned with their education, with 86.2% performing university-level functions specific to their bachelor's degree or the level of education they have attained.

> Job suitability varies considerably between fields of knowledge. Humanities graduates are the most overqualified for their jobs (28.9% perform non-university-level functions). Job suitability is highest among Health graduates.

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[6] Data are shown from 2017 onwards due to a change in the way this information was collected in that year's survey. Previously, only graduates who had a job for which their degree was a requirement could answer that they performed degree-specific functions. Since 2017, graduates are asked whether they perform degree-specific functions regardless of whether their degree was a job requirement.

Figure 21. Trend in the percentage of graduates performing bachelor's-degree-specific functions by broadened subfield (2020-2023)
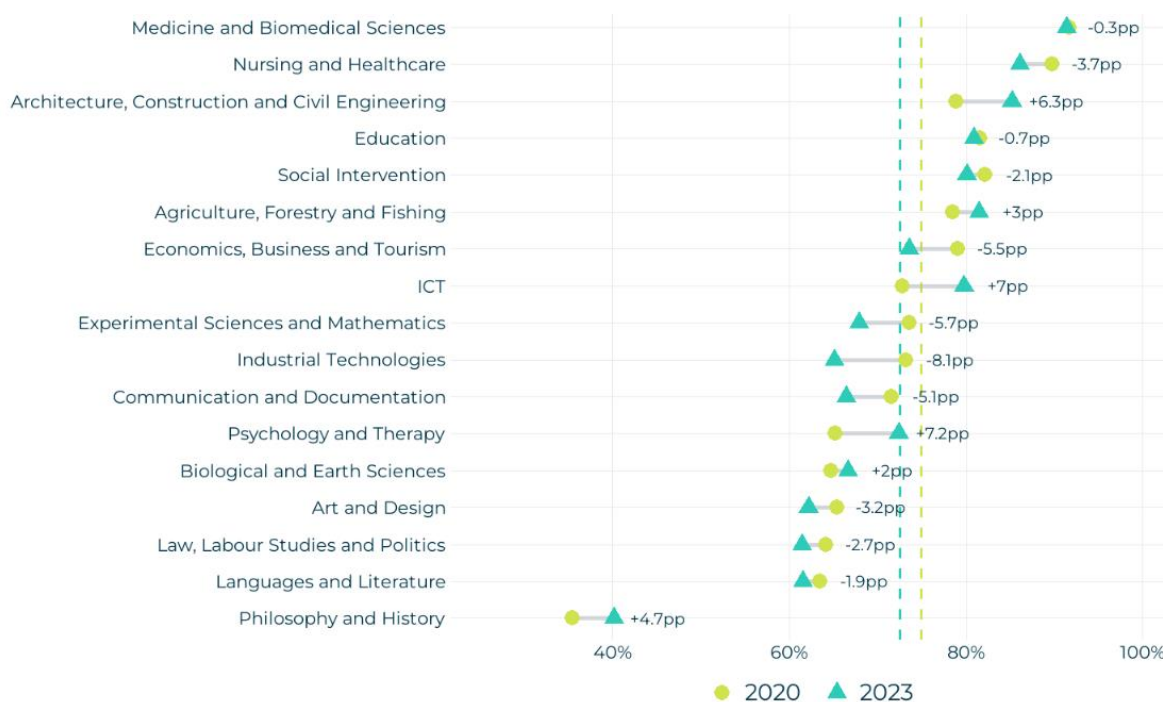
Note: the vertical lines represent the overall percentages for the year. The number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

> The trend in the percentage of graduates performing degree-specific functions varies by extended subfield. The most improved subfields are Psychology and Therapy; ICT; and Architecture, Construction and Civil Engineering. The subfields experiencing the greatest declines in this respect are Industrial Technology; Experimental Sciences and Mathematics; and Economics, Business and Tourism.

Figure 22. Performance of bachelor's-degree-specific functions by field of knowledge in 2023 (maximum and minimum specific subfield shown for each field)

Medicine and Dentistry (98.5%)

Architecture (88.5%)

Early Childhood, Primary and Secondary Teaching (82%)

84.6%

Catalan and Spanish Philology (77.7%)

Chemistry (74.5%)

73.3%

71.3%

67.2%

Sport and Nutrition (65.2%)

Earth Sciences (62.2%)

55.1%

Aeronautical Engineering (47.2%)

Fine Arts (36.8%)

Sociology (35%)

| Humanities | Social Sciences and Law | Experimental Sciences | Health Sciences | Engineering Sciences |

▲ Field average   ■ Field maximum   ✕ Field minimum

> There is also variation in each field of knowledge. Job suitability is lowest among bachelor's degree graduates in Humanities, especially Fine Arts graduates (36.8%).

Working conditions

> Contract type

Figure 23. Trend in contract type
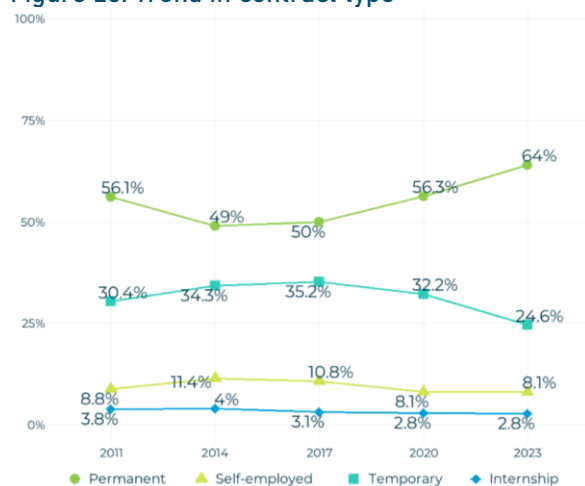
Figure 24. Contract type by sector (2023)
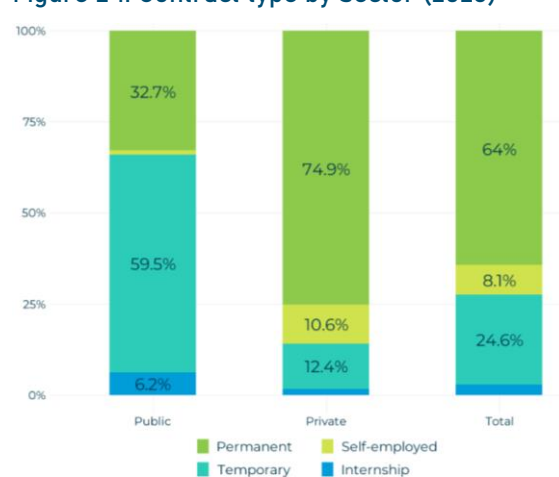
Figure 25. Trend in the percentage of bachelor's degree graduates on permanent contracts by broadened subfield (2020-2023)
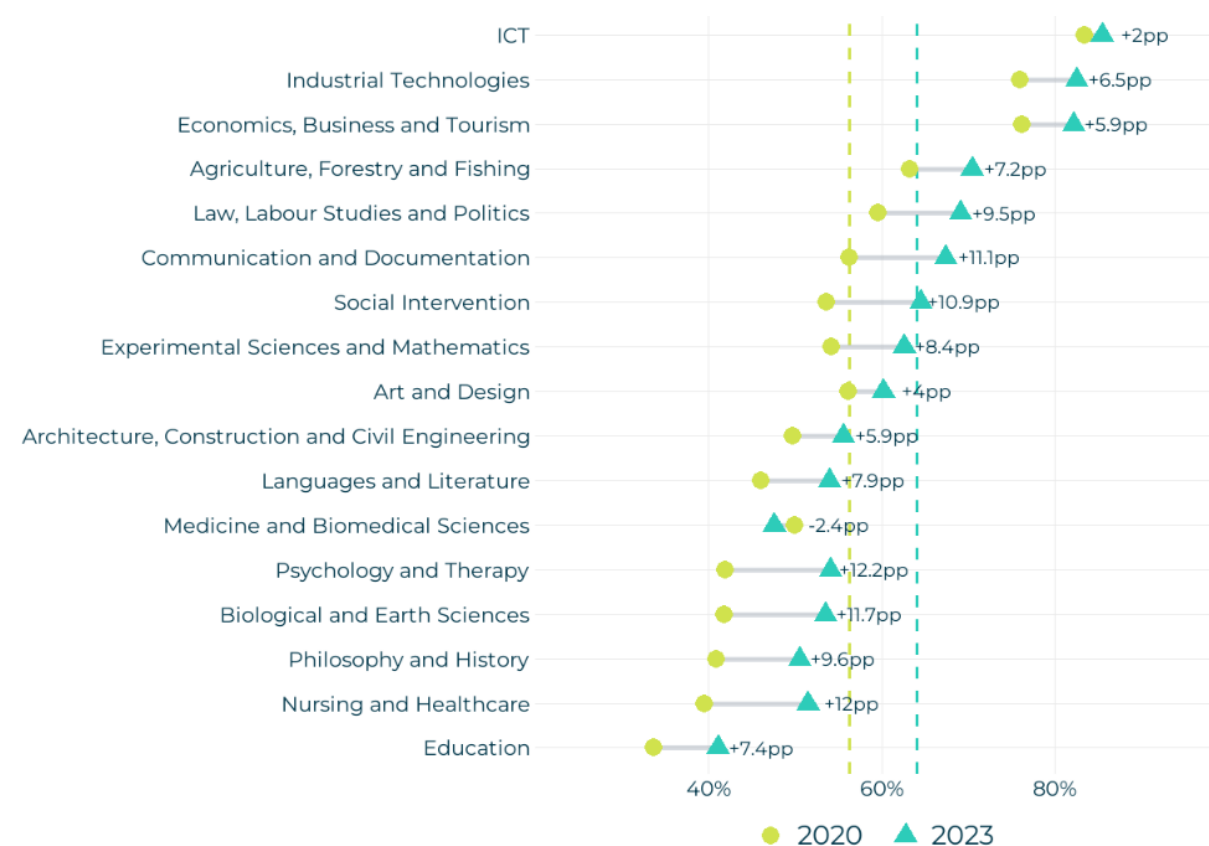
Note: the vertical lines represent the overall percentages for the year. The number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

Job stability has increased thanks to the 2022 labour reform,[7] with 64% of bachelor's degree graduates on permanent contracts

> This growth in stability has occurred across almost all educational subfields. The only exception is Medicine and Biomedical Sciences, where it has decreased by 2.4 percentage points.

> The public sector has a higher rate of temporary employment, with 6 out of 10 bachelor's degree graduates employed in this sector on temporary contracts. There is also a higher proportion of interns in the public sector (6.2%).

Table 1. Contract type by field of knowledge (2023)

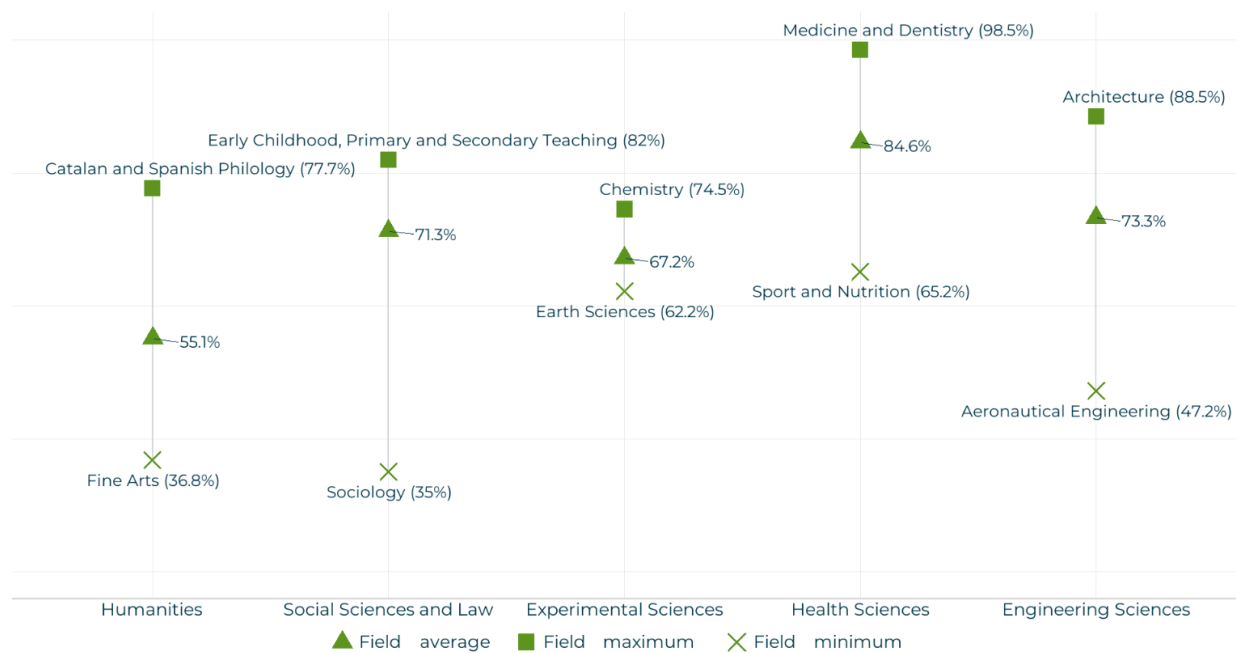|	Humanities	Social Sciences	Experimental Sciences	Health	Engineering
Permanent	54.3%	**67.1%**	56.7%	51.0%	**78.4%**
Self-employed	**9.8%**	5.6%	2.0%	**15.9%**	7.5%
Temporary	**31.1%**	24.8%	**32.0%**	**30.7%**	11.7%
Internship	3.6%	1.8%	**9.0%**	2.0%	2.1%
No contract	**1.2%**	0.6%	0.2%	0.4%	0.3%

Note: for each contract type, higher relative proportions compared to the other knowledge fields (more than 0.5 percentage points) are shown against a shaded background.

There are some differences in contract type by field of knowledge

> In Humanities and Health, self-employment and temporary contracts are relatively prominent.

> In Sciences, there are more temporary and internship contracts. It should be noted that 56.3% of graduates in this field are pursuing a PhD.[8]

> While job stability has increased overall, the proportion of graduates on permanent contracts in 2023 varies significantly between fields, ranging from 51% in Health to 78.4% in Engineering.

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[7] The labour reform enacted by Royal Decree-Law 32/2021 has had an undeniable impact in terms of reducing the proportion of temporary contracts (85% of contracts signed in Catalonia in 2019 were temporary, compared to 50% in 2023). Although part of the increase in permanent contracts is due to the proliferation of permanent seasonal contracts (and it remains to be seen how this issue will develop in the future), the impact of the reform is still clear according to current data (Labour and Production Model Observatory, 2022 and 2023).

[8] Employers of graduates in Sciences – particularly in the so-called Biosciences – are particularly interested in candidates with a PhD. More information on this phenomenon can be found in the report Employability and university education in the field of Biosciences (AQU Catalunya, 2022).

> Full-time employment

Figure 26. Trend in the percentage of bachelor's degree graduates in full-time employment
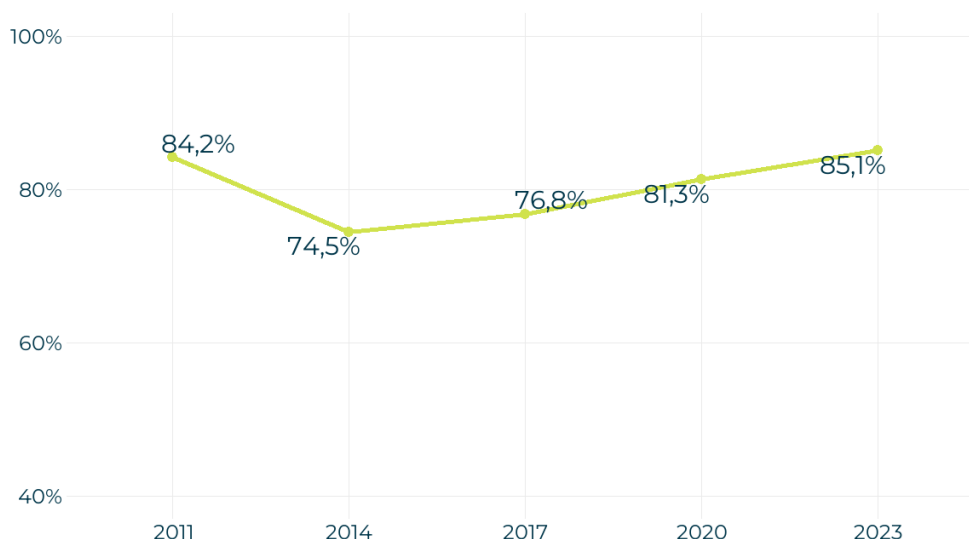
Figure 27. Full-time employment comparison by field of knowledge (2020–2023)

· ·
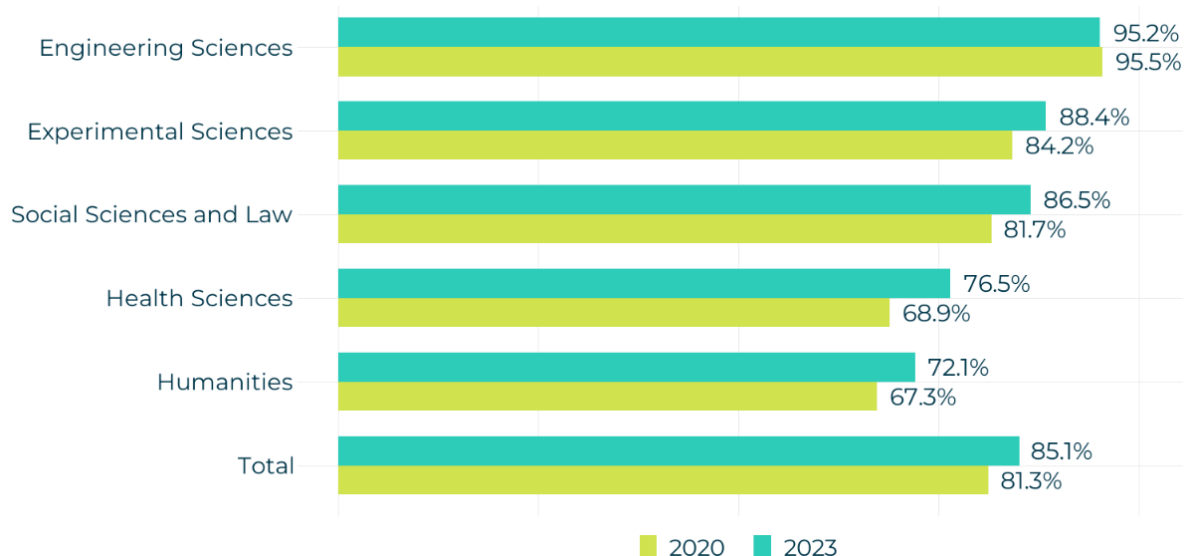
Full-time employment is on an upward trend

> Eighty-five per cent of bachelor's degree graduates are employed full-time, four percentage points more than in 2020.

> Although full-time employment has increased across all fields of knowledge (with the exception of Engineering, where the rate is over 95% for both 2020 and 2023), there are considerable differences between them. Humanities has the lowest percentage of graduates working full-time (72.1% in 2023).

> Income

Figure 28. Trend in average gross monthly earnings and equivalised earnings adjusted for inflation[9] (only bachelor's degree graduates working full-time in Spain)

- Average gross monthly earnings
- Equivalised earning adjusted for inflation
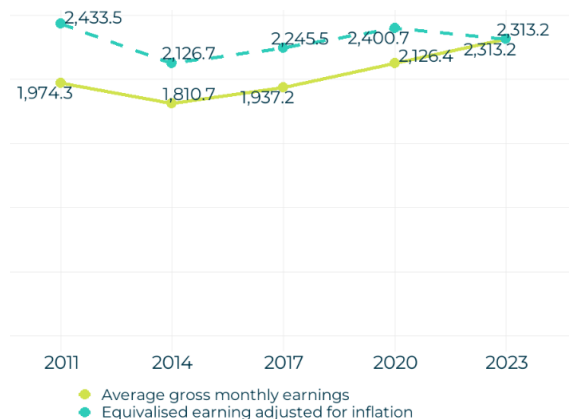
Bachelor's degree graduates have more purchasing power now than in the worst years of the financial crisis

> The average gross earnings of bachelor's degree graduates have increased since 2014, but are not back to 2011 levels when the effect of inflation is taken into account.

> However, their purchasing power has declined slightly over the past three years due to the high inflation rates of late.

Figure 29. Average gross monthly earnings by field of knowledge in 2023 (maximum and minimum specific subfield shown for each field)

▲ Field average ■ Field maximum ✕ Field minimum

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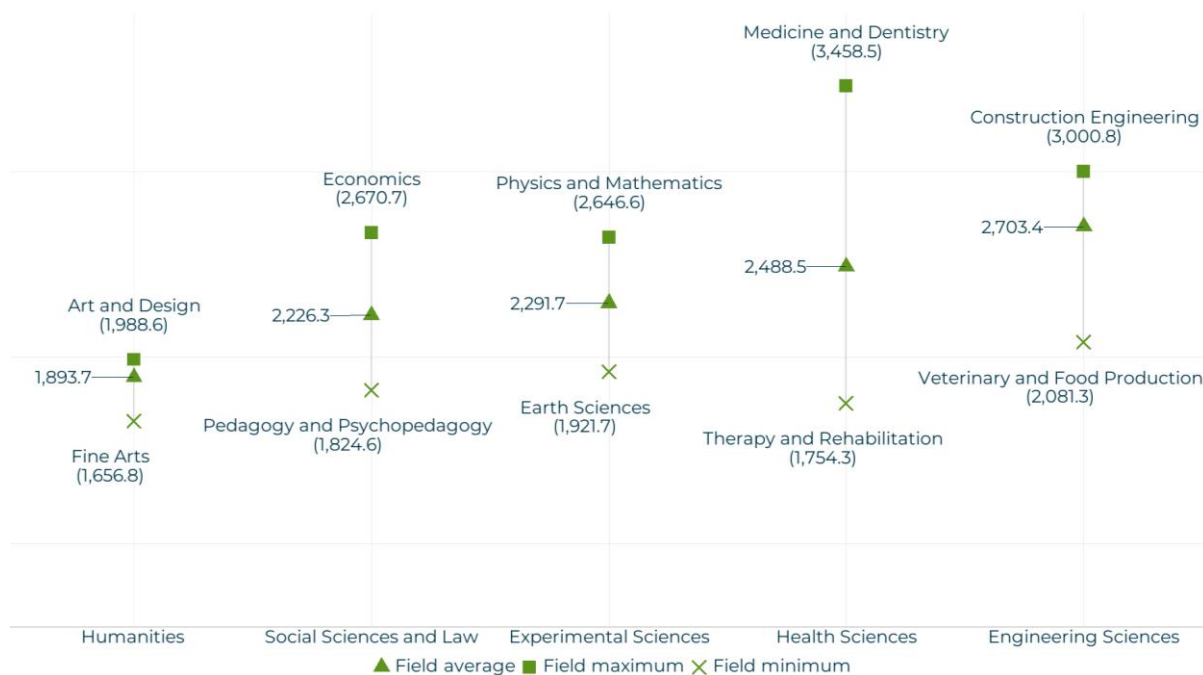
[9] Inflation-adjusted earnings make it possible to compare purchasing power over time by taking account of changes in the average cost of living. Specifically, this report shows equivalised average earnings assuming the cost of living in 2023. To calculate these numbers, we use the Consumer Price Index (CPI) published by the Spanish National Statistics Institute in January of each year analysed (base 2021, consulted in May 2023). For each year *x*, the following formula is applied: inflation-adjusted earnings = observed earnings / index year *x* * index year 2023.

....

Average gross earnings are highest in Engineering, Health and Sciences

> The widest internal range between subfields is found in Health (€1,650), which also has the subfield with the highest average gross earnings in the entire system (Medicine and Dentistry, €3,458.50). Engineering has the second widest internal range, at around €1,000.

> Humanities has the lowest salaries and the smallest internal range. Graduates in the subfield of Fine Arts have the lowest average gross earnings in the entire system (€1,656.80).

> Level of responsibility

Figure 30. Level of responsibility over others at work (2023)

64.5% (13,294)   6.1% (1,265)

29.4% (6,050)

- Manager/Director
- Middle manager
- No responsibility over others
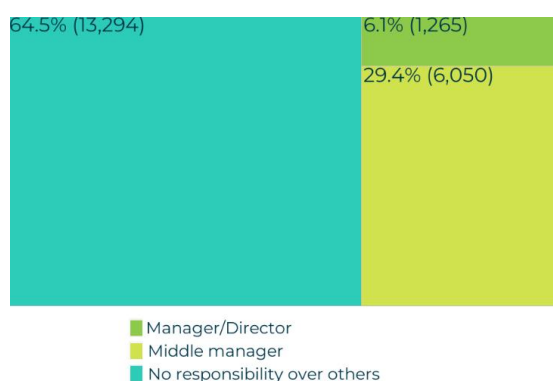
Figure 31. Percentage of employed bachelor's degree graduates with responsibility over others at work (director/manager or middle manager) by economic sector (2023)

Sector	%
Construction	60.6%
Production of raw materials and energy	55.5%
Business services	45.9%
Consumer Services	45.4%
Industry	44%
Communication Technologies	40.9%
Financial inst., insurance, real estate	39.7%
Information and communication	38.9%
Health and social care	26.5%
Education, culture and research	23.1%
Public administration	21.7%
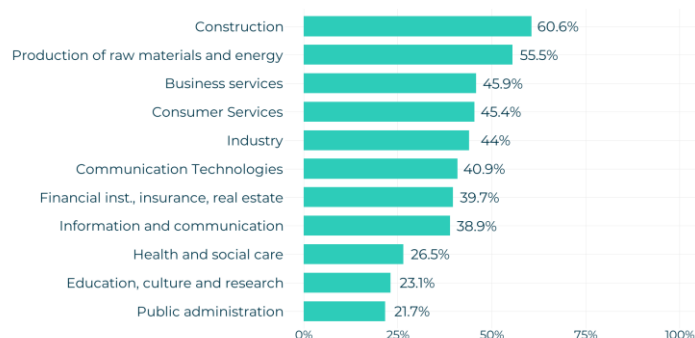
Figure 32. Comparison of the percentage of employed bachelor's degree graduates with responsibility over others at work (director/manager or middle manager) by field of knowledge (2020–2023)

Field	2023	2020
Engineering Sciences	45.2%	52.2%
Social Sciences and Law	37.7%	42.1%
Humanities	27.8%	31.3%
Health Sciences	26.4%	32.1%
Experimental Sciences	25.5%	32.7%
Total	34.8%	40.9%

■ 2020 ■ 2023

··
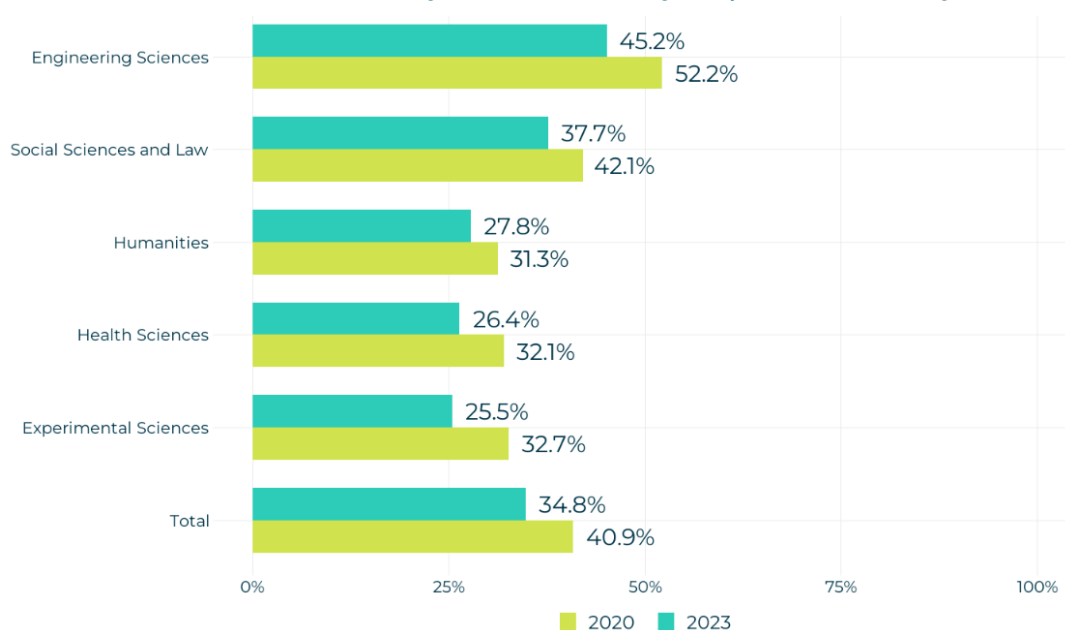
About 35% of bachelor's degree graduates have responsibility over others at work

> The percentage of graduates with responsibility over others at work has dropped by six points since 2020, affecting all knowledge fields.

> This percentage varies significantly between fields of knowledge, with graduates in Engineering and Social Sciences more likely to have responsibility over others at work than their counterparts in other fields. As shown in Figure 31, this is due to the economic sectors in which they are employed.

> Job satisfaction

Figure 33. Trend in overall job satisfaction (scale of 0 to 10)[10]

| 2011 | 2014 | 2017 | 2020 | 2023 |

(7,5 — 7,6 — 7,8 — 7,9 — 8,0)
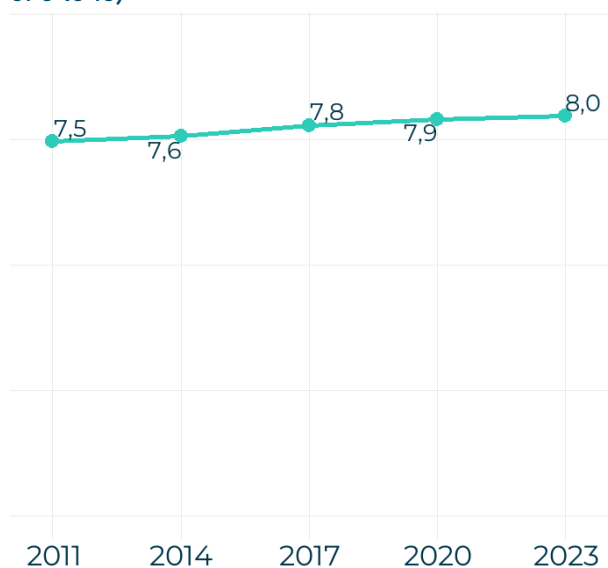
Figure 34. Overall job satisfaction by field of knowledge in 2023 (scale of 0 to 10)

Social Sciences and Law	8
Humanities	7.7
Health Sciences	7.9
Experimental Sciences	8
Engineering Sciences	8.1

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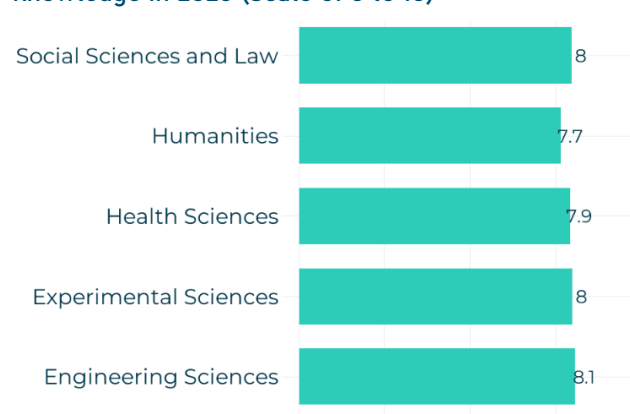
[10] In the surveys prior to 2023, satisfaction was rated out of 7 and later converted to a scale of 0 to 10. In the 2023 survey, it was rated directly out of 10. Caution should therefore be exercised when analysing trends.

Figure 35. Graduates' overall job satisfaction by field of knowledge in 2023, according to whether or not they perform university-level functions at work (scale of 0 to 10)
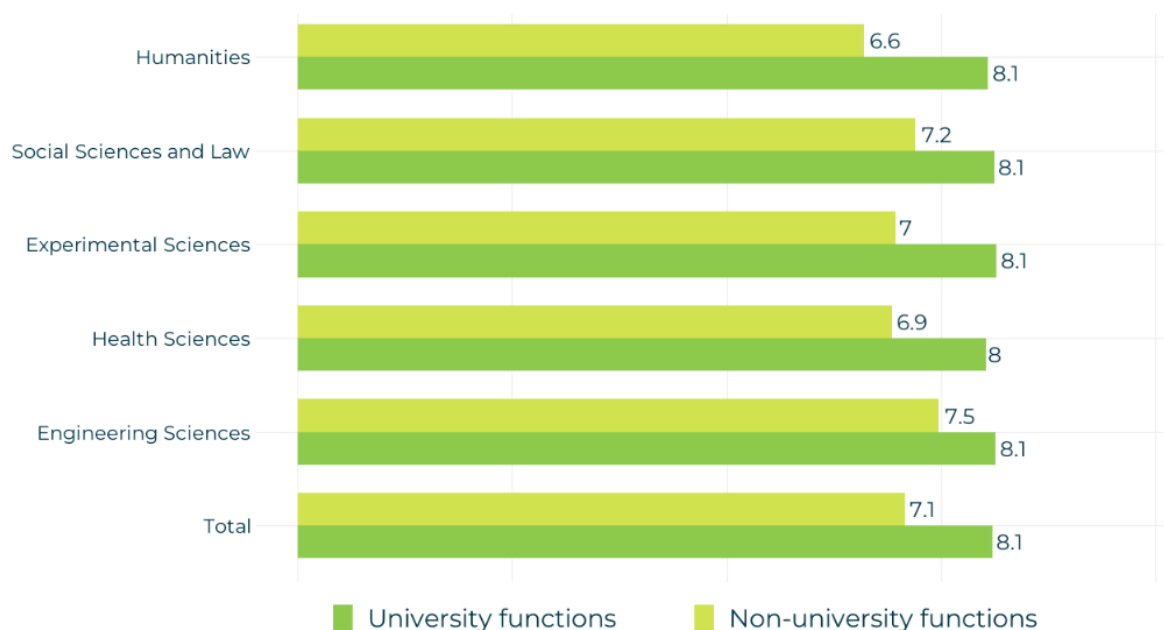
Job satisfaction is considerably high across all fields of knowledge

> Humanities graduates are the least satisfied with their jobs (7.7), although differences with the other fields are small.

> There are marked differences in graduates' overall job satisfaction according to the functions they perform at work. This difference is particularly large among Humanities graduates (1.5 points). However, job satisfaction appears to be almost identical across knowledge fields for those performing university-level functions.

> Occupational quality index[11]

Figure 36. Trend in the occupational quality index

65,1   59,6   62,6   66,6   71,7

2011   2014   2017   2020   2023
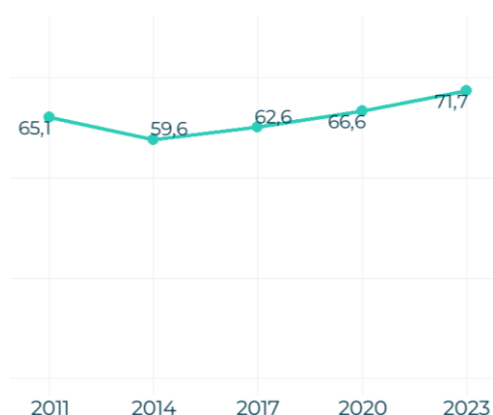
The occupational quality index has reached a record high in 2023

> The occupational quality index (OQI) allows us to synthesise various employment indicators such as contract type, pay, job suitability and job satisfaction.

Figure 37. Trend in the occupational quality index by broadened subfield (2020-2023)

Subfield	Difference
ICT	4.6
Industrial Technologies	4.4
Medicine and Biomedical Sciences	4.1
Economics, Business and Tourism	4.6
Architecture, Construction and Civil Engineering	5.3
Experimental Sciences and Mathematics	7
Agriculture, Forestry and Fishing	8.1
Nursing and Healthcare	6.5
Law, Labour Studies and Politics	4.6
Communication and Documentation	3
Biological and Earth Sciences	7.3
Social Intervention	4.3
Psychology and Therapy	9.6
Education	7.1
Art and Design	8.3
Languages and Literature	2.3
Philosophy and History	6.8

● 2020   ▲ 2023

Note: the vertical lines represent the average for the year. The number in the graph shows the difference between 2023 and 2020.

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[11] The occupational quality index (OQI) is based on various indicators: contract type, job satisfaction, pay and job suitability. The values range from 0 to 100: the higher the rating, the better the occupational quality experienced. For further details, refer to Corominas et al. (2012).

Figure 38. Occupational quality index by field of knowledge in 2023 (maximum and minimum specific subfield shown for each field)
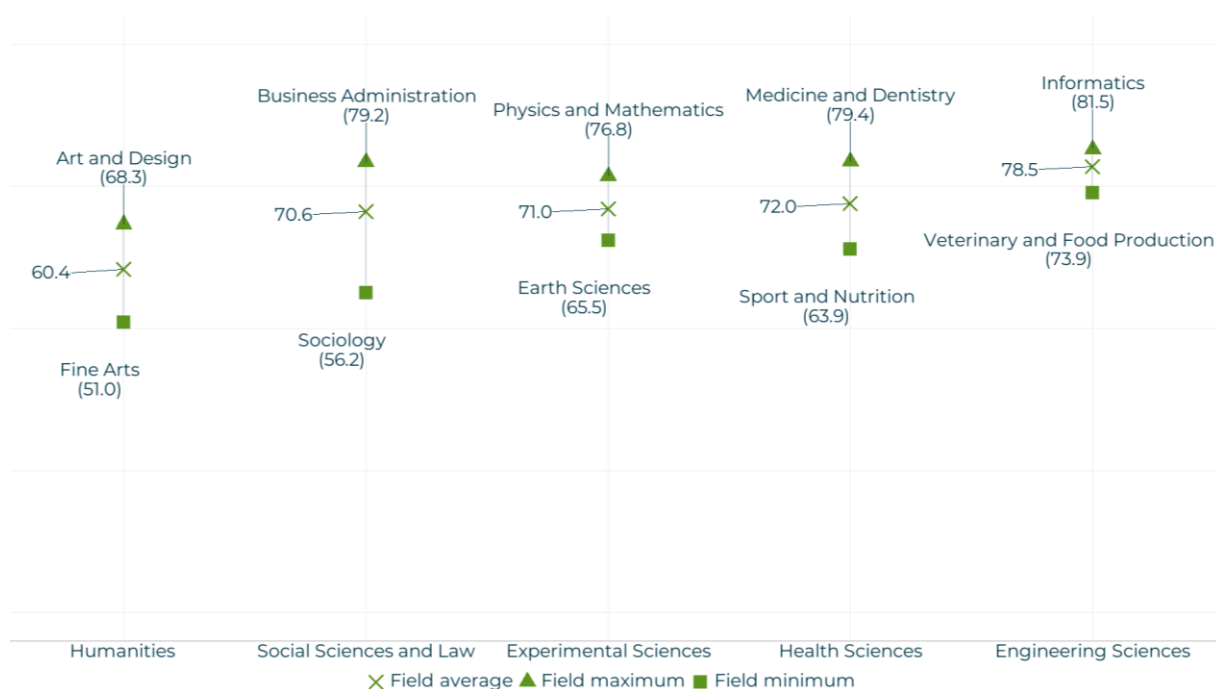
Occupational quality has increased across all educational subfields

> As seen above, the increase in occupational quality could be due to the general improvement in job stability.

> However, it is worth noting that Humanities graduates report lower occupational quality than their counterparts in other fields. In fact, the average in this field (60.4) is nearly 20 points lower than the average in the field of Engineering (78.5).

Employment history and the job seeking process

> Employment history: combining study and work

Figure 39. Trend in student profile: combining study and work

- Full-time student
- Working in a related job
- Working in non-related job
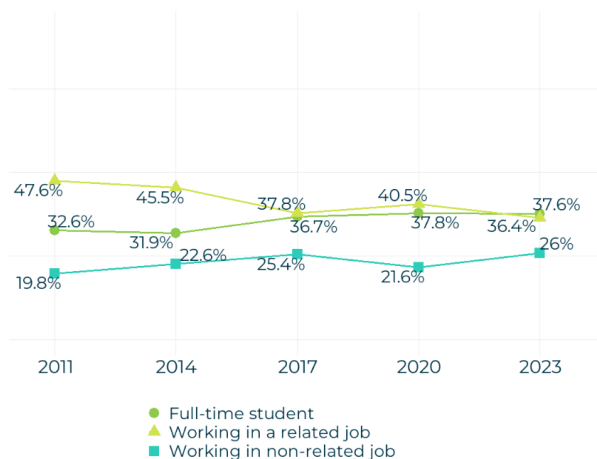
According to the 2023 survey, most bachelor's degree graduates were full-time students

> The proportion of graduates who worked in an unrelated job has increased compared to 2020.

Figure 40. Functions performed at work and combining studies with work (2023)

- Functions of the specific degree
- University functions
- Non-university functions
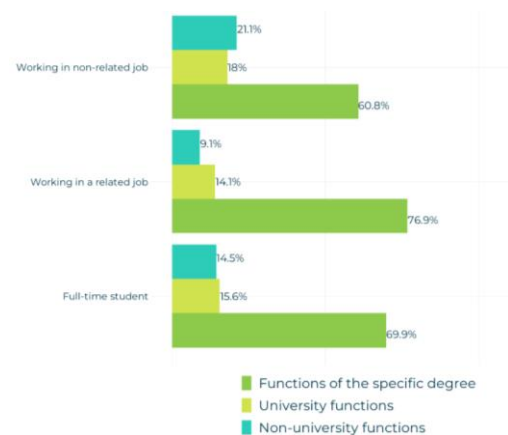
Graduates who combined their studies with a degree-related job were more likely to find postgraduate employment performing degree-related functions

> This relationship is also observed for those who started their current job after graduation.

Figure 41. Combining studies and work by field of knowledge (2023)

Legend:
- Full-time student
- Working in a related job
- Working in non-related job

Field	Working in non-related job	Working in a related job	Full-time student
Humanities	36.5%	24.6%	38.9%
Social Sciences and Law	28.6%	39.2%	32.2%
Experimental Sciences	24.4%	17.9%	57.7%
Health Sciences	28.4%	29.1%	42.5%
Engineering Sciences	14.1%	52.1%	33.8%
Total	25.9%	36.4%	37.6%
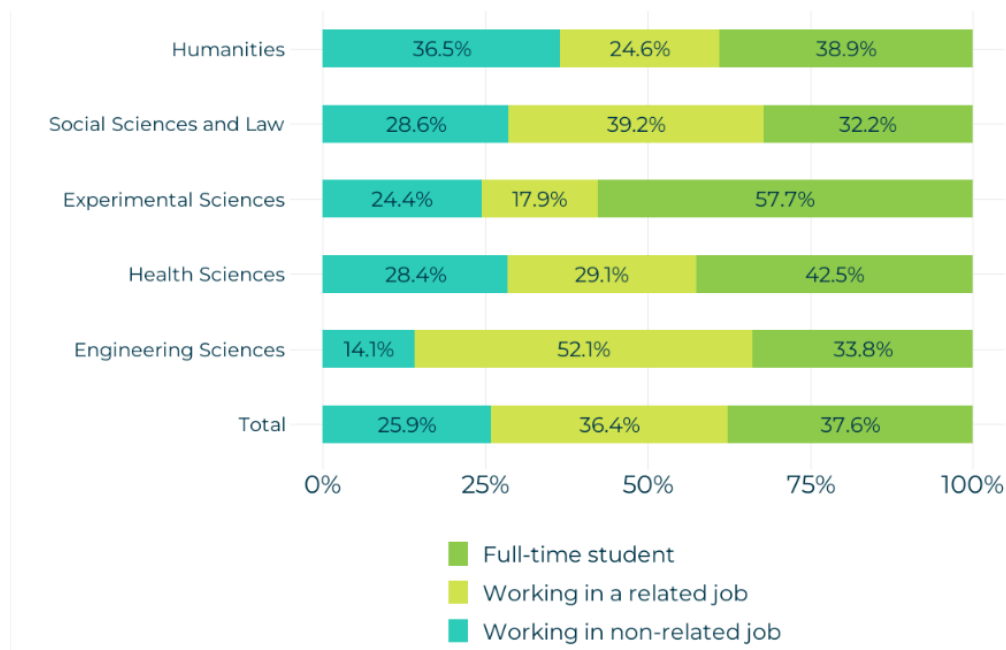
Sciences has the highest proportion of graduates who pursued their bachelor's degree as full-time students

> A more detailed analysis by subfield shows that Medicine and Biomedical Sciences has the highest percentage of graduates who were full-time students (65%), followed by Biological and Earth Sciences (59%).

> Time taken to access the labour market

Figure 42. Trend in the amount of time it took graduates to find their first job (2011–2023)
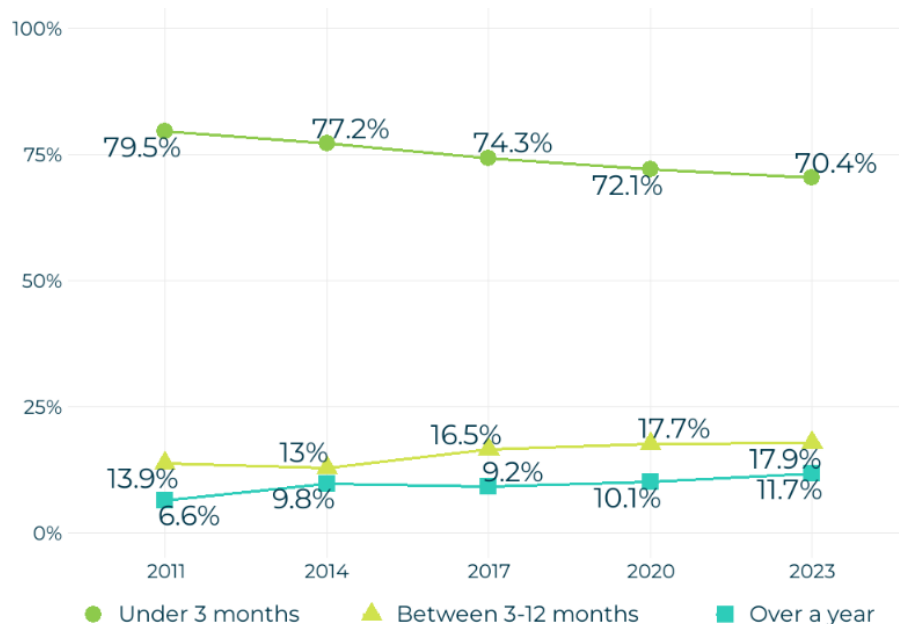
Figure 43. Time it took graduates to find their first job by field of knowledge (2023)
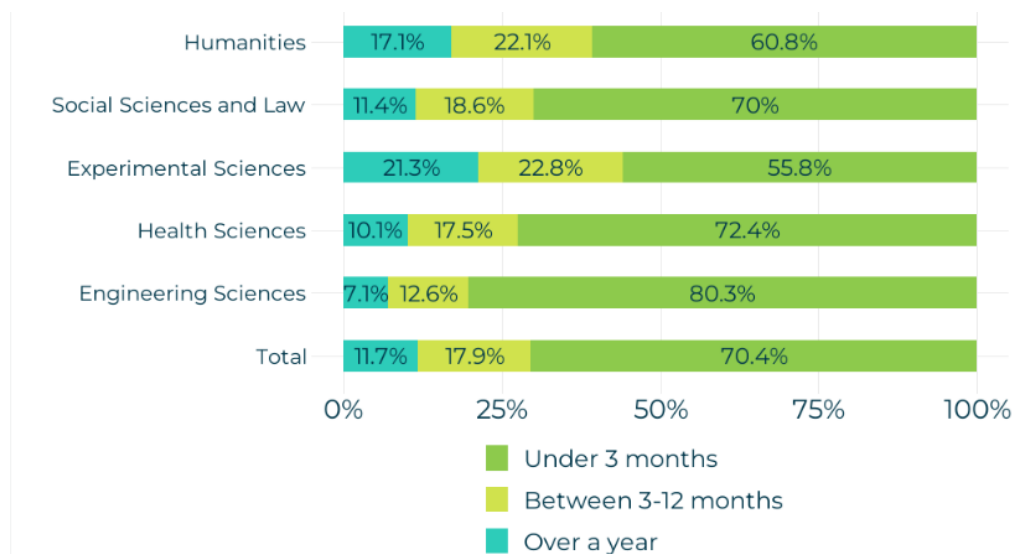
Seven out of 10 bachelor's degree graduates found employment within three months of graduating

> However, this percentage has decreased over the study period, with graduates tending to take longer to find their first job than before.
> This factor varies significantly by field of knowledge. Compared to the other fields and to the university system as a whole, graduates in Sciences and Humanities take the longest to find employment.

> Pathway to first job

Figure 44. Trend in the pathways taken by graduates to find their first job (2020–2023)
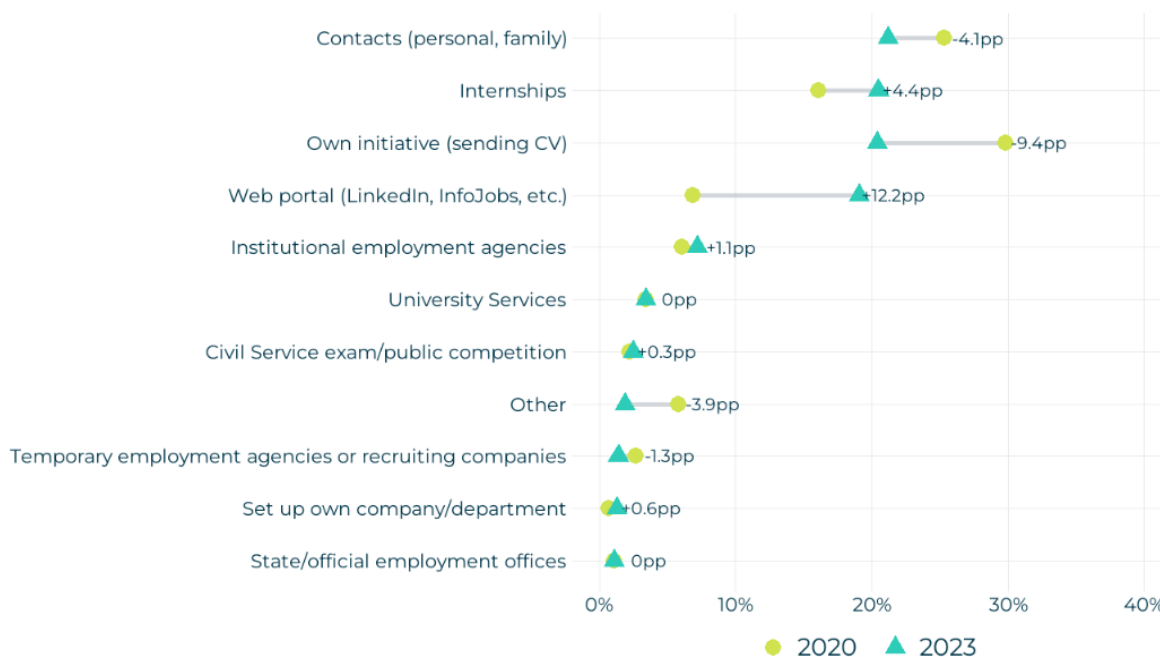
Note: the number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

Personal and family contacts, university internships and own initiative are the main pathways that graduates take to find their first job

> However, the relative importance of personal and family contacts and own initiative has decreased since the previous survey.

> There has been a significant increase in the percentage of graduates who found their first job through a website (from 7% in 2020 to 19% in 2023).

Figure 45. The four most prominent pathways by field of knowledge (2023)

Engineering Sciences
- 22.6%
- 26.5%
- 14.9%
- 19.8%

Health Sciences
- 9.9%
- 22.8%
- 24.6%
- 21.6%

Experimental Sciences
- 22.7%
- 20.8%
- 18.8%
- 18.6%

Social Sciences and Law
- 20.8%
- 18.7%
- 20.3%
- 21.2%

Humanities
- 20.5%
- 10.1%
- 25.1%
- 25.4%

■ Contacts (personal, family)   ■ Own initiative (sending CV)
■ Internships   ■ Web portal (LinkedIn, InfoJobs, etc.)
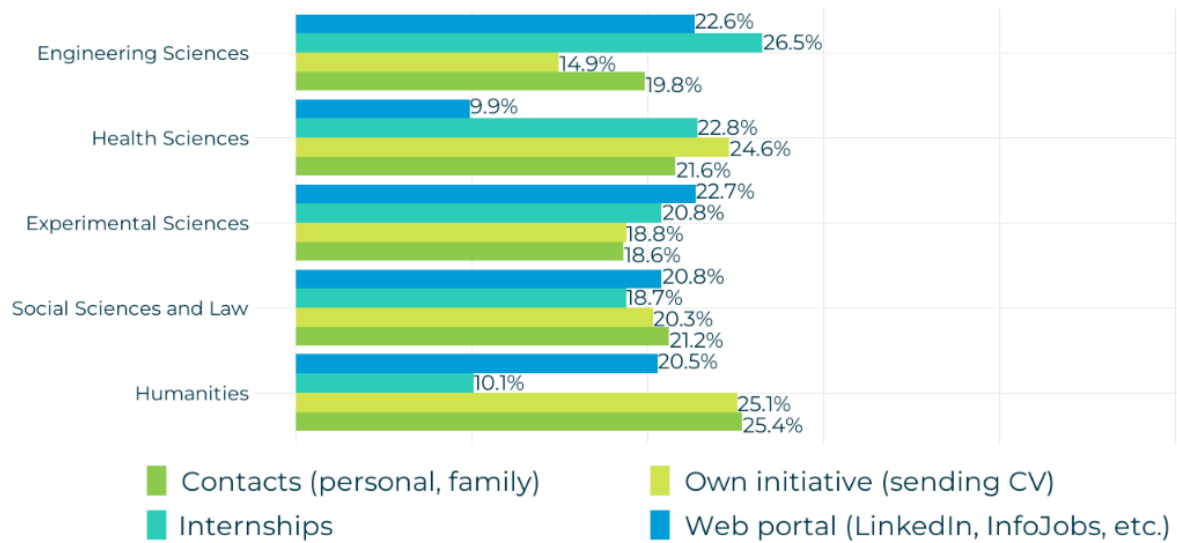
> The most prominent pathways vary by field of knowledge: while internships are more prominent for Engineering graduates, personal contacts and own initiative are more prominent for their Humanities counterparts.

Mobility for employment

> Where recent bachelor's degree graduates work

Figure 46. Where bachelor's degree graduates work (2023)

85.5% (16,345)

6.5% (1,245)

8% (1,521)

■ Catalonia
■ Other autonomous communities in Spain
■ Rest of the world

The vast majority of graduates find employment in Catalonia (85.5%)

> Only 6% work abroad.

Figure 47. Trend in the percentage of bachelor's degree graduates working abroad (Spanish graduates only)

2,1% 2,7% 2,8% 3,4% 5,4%

2011 2014 2017 2020 2023
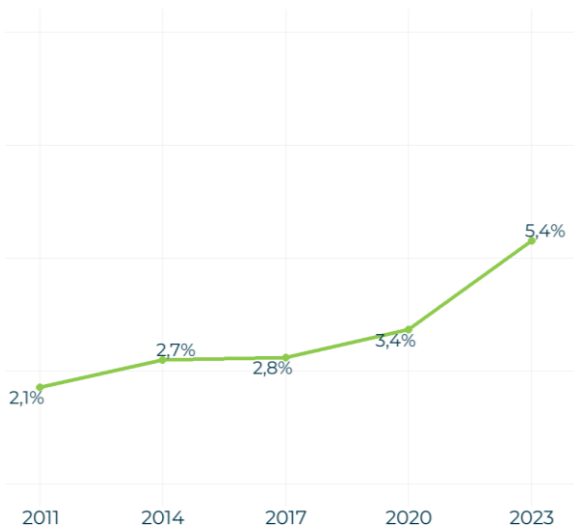
The percentage of graduates working abroad has increased by two points

> The increase in the percentage of graduates working abroad is more pronounced than in previous years, reaching an all-time high in 2023.

Table 2. Trend in the percentage of bachelor's degree graduates working abroad by field of knowledge (Spanish graduates only)

	2011	2014	2017	2020	2023	Diff. 2023-2011
Humanities	4.8%	3.8%	3.7%	2.9%	5.7%	0.9 pp
Social	1.5%	1.7%	1.8%	1.9%	3.5%	2 pp
Experimental	2%	3.9%	4.6%	7.5%	10.5%	8.5 pp
Health	1.2%	2.2%	2.3%	2.8%	3.5%	2.3 pp
Engineering	2.9%	4.7%	4.2%	4.6%	7.8%	4.9 pp
Total	2.1%	2.7%	2.8%	3.4%	5.4%	3.2 pp

Note: percentages above the overall figure for the year are shown against a shaded background.

The highest proportion of graduates working outside Spain is found in Sciences (10.5%)

> The percentage in this field has grown the most over the study period (8.5 percentage points).
> Engineering has the second-highest proportion of graduates working abroad (7.8%).

Satisfaction with the bachelor's degree

> Would graduates choose the same bachelor's degree again

Figure 48. Trend in the percentage of graduates who would choose the same bachelor's degree again

73,3%   71,7%   71%   72,6%   69,8%

2011   2014   2017   2020   2023
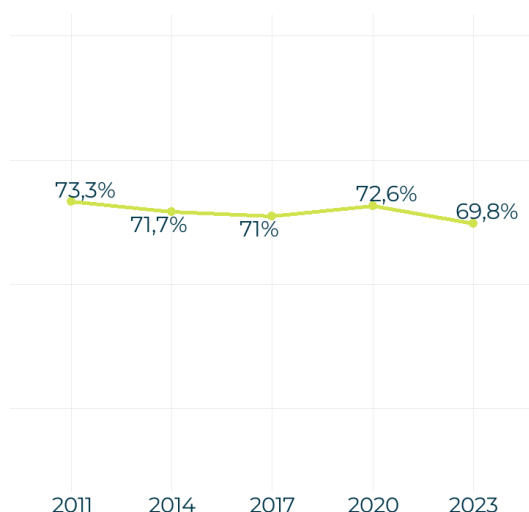
The percentage of graduates who would choose the same degree again has dropped slightly

> However, satisfaction is still high: around 7 out of 10 graduates would choose the same bachelor's degree again.

Figure 49. Trend in the percentage of graduates who would choose the same bachelor's degree again by broadened subfield (2020–2023)

Medicine and Biomedical Sciences	-1.4pp
Education	-0.8pp
Nursing and Healthcare	-7.8pp
ICT	-4pp
Experimental Sciences and Mathematics	-0.3pp
Psychology and Therapy	+1.4pp
Agriculture, Forestry and Fishing	+9.2pp
Social Intervention	-1.4pp
Industrial Technologies	-4pp
Philosophy and History	-1.5pp
Law, Labour Studies and Politics	-1.7pp
Biological and Earth Sciences	+2.2pp
Architecture, Construction and Civil Engineering	+1.7pp
Art and Design	-9.6pp
Economics, Business and Tourism	-5.6pp
Languages and Literature	0pp
Communication and Documentation	-3.8pp

50%   60%   70%   80%   90%

● 2020   ▲ 2023

Note: the vertical lines represent the overall percentages for the year. The number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

The percentage of graduates who would choose the same bachelor's degree again has dropped in all subfields except Agriculture, Forestry and Fishing; Biological and Earth Sciences; Architecture, Construction and Civil Engineering; and Psychology and Therapy

> The largest decreases are in Art and Design (-9.6 points), Nursing and Health Sciences (-7.8 points), and Economics, Business and Tourism (-5.6 points).

Figure 50. Main reasons why graduates would not choose to take the same bachelor's degree again in 2023 (respondents could check more than one response)
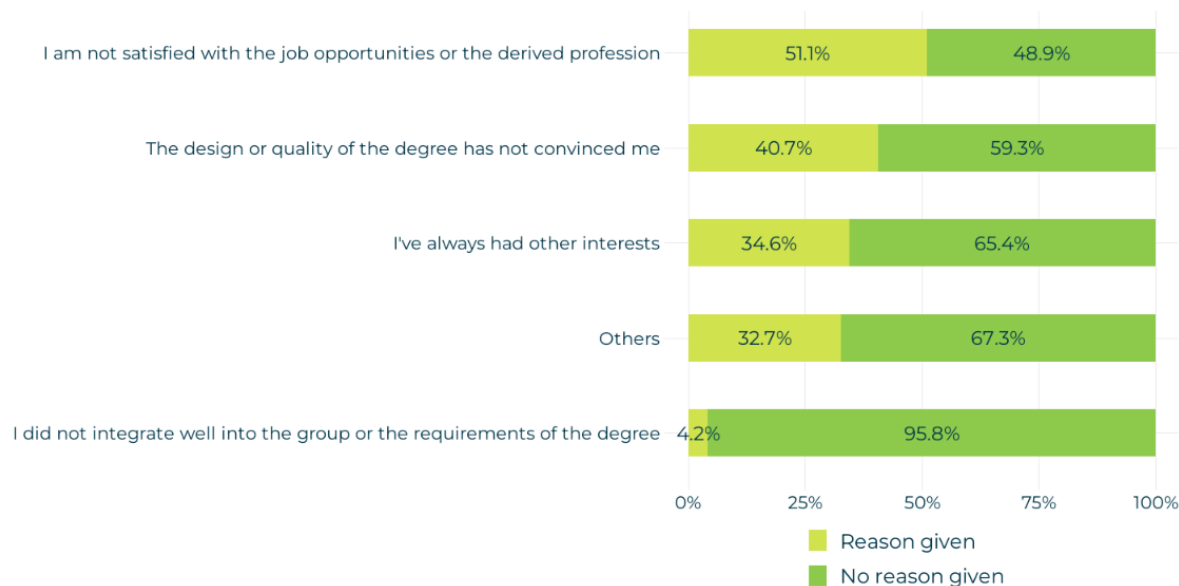
The main reason given by those who would not choose the same bachelor's degree again is dissatisfaction with the resulting career opportunities

> A considerable proportion of graduates (40.7%) would not choose the same bachelor's degree again because they were dissatisfied with its design or quality, i.e. aspects on which institutions can improve.
> Graduates' satisfaction with the design of their degree varies by field of knowledge: Humanities graduates tend to be more dissatisfied overall. The field with the least dissatisfied graduates is Health (average percentage of 28.7%).
> There are also significant differences between subfields: among those who would not choose the same bachelor's degree again, 66% in Fine Arts said that the reason was the design or quality of the degree. Other subfields, such as Nursing, show substantially lower values for this.

Figure 51. Percentage of graduates who would not choose the same bachelor's degree again due to dissatisfaction with the design or quality of the degree, by field of knowledge in 2023 (maximum and minimum specific subfield shown for each field)
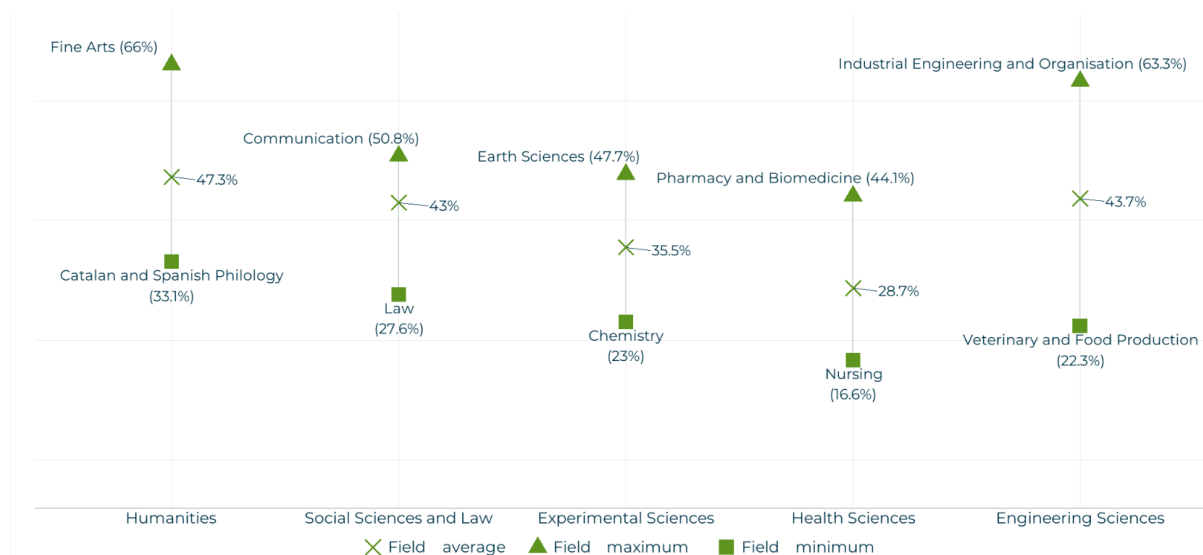
Note: subfields with a sample size of less than 10 are excluded.

> Willingness to enrol at the same university again

Figure 52. Trend in the percentage of graduates who would enrol at the same university again
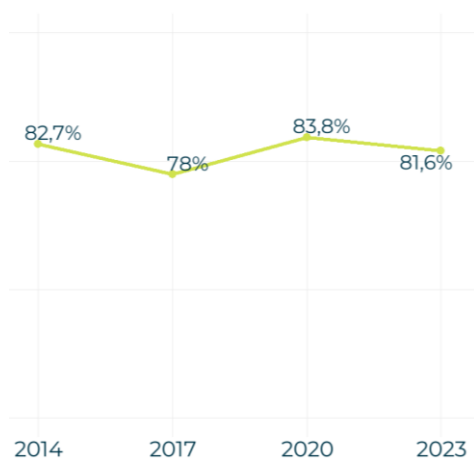
Around 8 out of 10 graduates would enrol at the same university again

> However, this percentage has fallen slightly (by 2.2 points) since 2020.

> The knowledge fields vary in this respect: Nine out of ten graduates in the field of Sciences would enrol at the same university again. The lowest percentage is found in Humanities, although it is still close to 80%.

Figure 53. Trend in the percentage of graduates who would enrol at the same university again by field of knowledge (2020–2023)
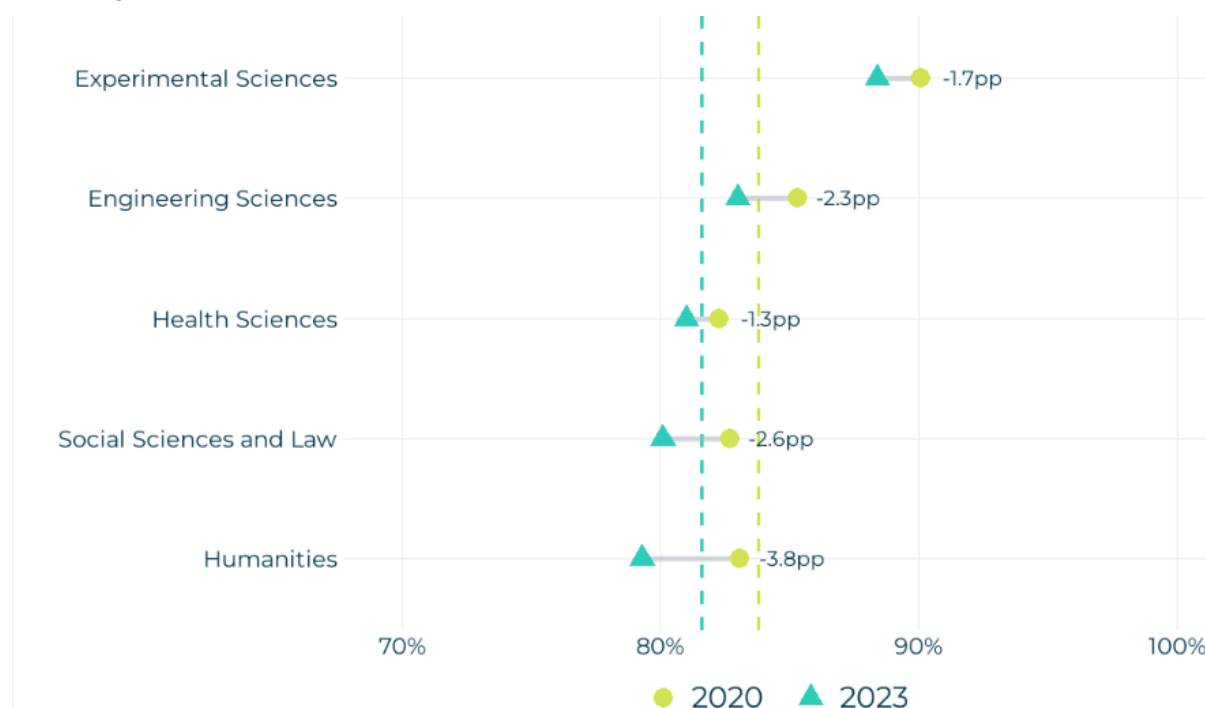

Note: the vertical lines represent the overall percentages for the year. The number in the graph shows the difference in percentage points (pp) between 2023 and 2020.

Figure 54. Main reasons why graduates would not enrol at the same university again in 2023 (respondents could check more than one response)
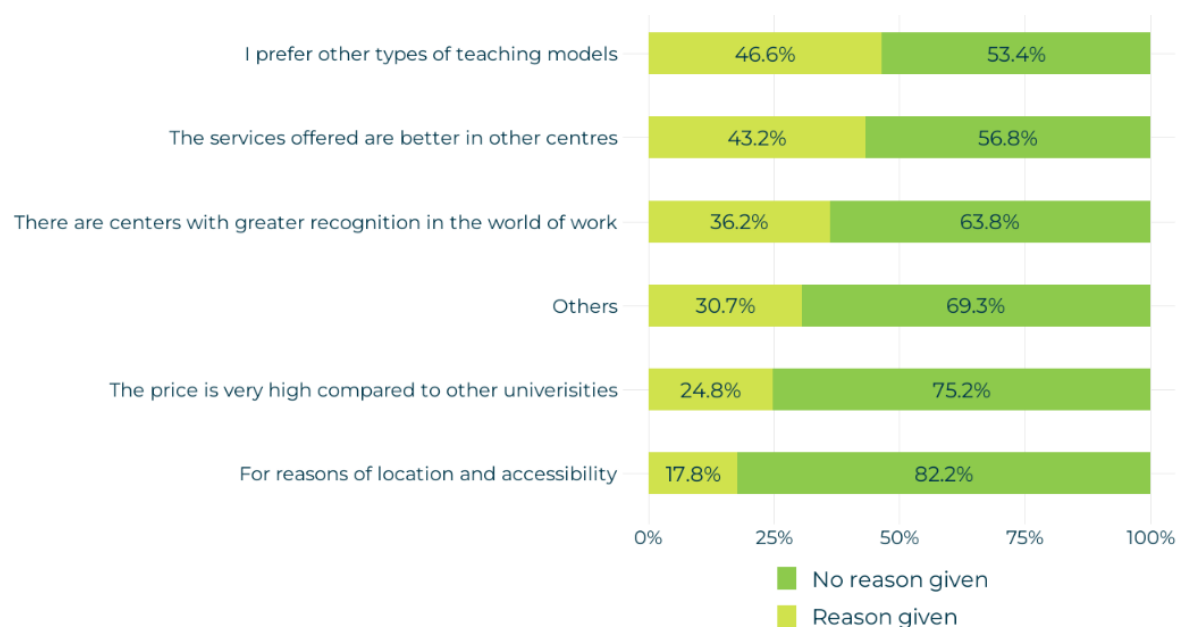
> The most common reason why graduates would not enrol at the same university again is that they prefer other ways of learning. A significant proportion also stated that the services offered at other institutions are better (43.2%) and that there are institutions with greater recognition in the world of work (36.2%).

> Education provided by the bachelor's degree[12]

Figure 55. Graduates' rating of the education they received (2023) and the increase compared to 2020 (scale of 0 to 10)
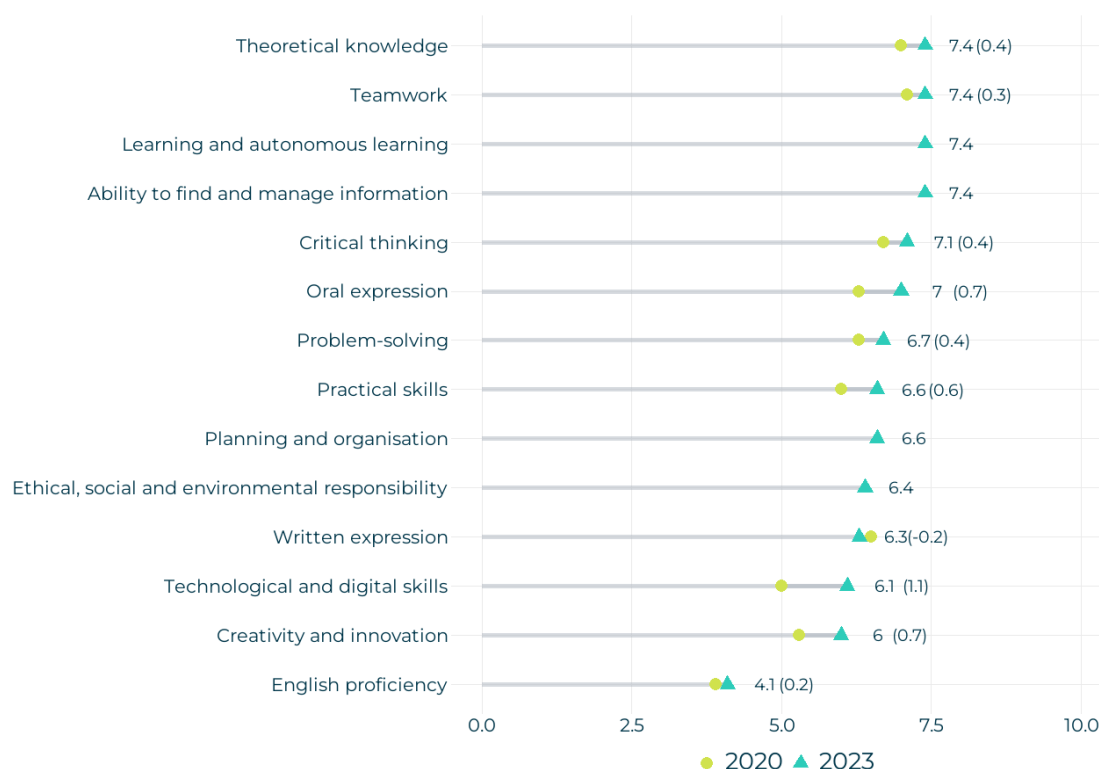
Note: the difference between 2023 and 2020 is shown in brackets. some skills were included in the survey for the first time in 2023, so no comparison is available.

English proficiency is the only skill rated below 6 out of 10

> Almost all comparable skills were rated higher than in 2020, particularly oral expression, creativity and innovation, and practical knowledge. The only skill rated slightly lower was written expression.

> The most highly rated skills are teamwork, theoretical knowledge, autonomous learning, and the ability to find and manage information.

> The table below shows rating increases across all knowledge fields.

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[12] In the surveys prior to 2023, skills were rated out of 7 and later converted to a scale of 0 to 10. In the 2023 survey, they was rated directly out of 10. Caution should therefore be exercised when analysing trends.

Table 3. Graduates' rating of the education they received (2023) and the difference compared to 2020, by field of knowledge (scale of 0 to 10)

	Experimental Sciences		Engineering		Humanities		Health		Social Sciences	
	2023	Diff.	2023	Diff.	2023	Diff.	2023	Diff.	2023	Diff.
Theoretical knowledge	7.9	0.5	7.3	0.4	7.4	0.3	7.6	0.4	7.2	0.4
Learning and autonomous learning	7.7	-	7.8	-	7.5	-	7.4	-	7.2	-
Ability to find and manage information	7.6	-	7.3	-	7.6	-	7.6	-	7.2	-
Critical thinking	7.3	0.4	6.9	0.6	7.6	-0.1	7.2	0.3	7	0.4
Problem-solving	7.3	0.6	7.3	0.1	6	0.5	6.7	0.4	6.3	0.3
Teamwork	7.3	0.3	7.4	0.4	6.6	0.6	7.6	0.3	7.6	0.2
Practical knowledge	6.9	0.4	6.5	1.1	6	0.9	7.1	0.3	6.4	0.3
Oral expression	6.7	0.7	6.4	0.9	7.2	0.7	7.1	0.6	7.2	0.7
Technological and digital skills	6.7	0.9	6.9	0.8	5.5	1.6	6	1.3	5.8	1.2
Planning and organisation	6.5	-	6.6	-	6.4	-	6.7	-	6.7	-
Written expression	6.3	0	5.6	0.1	7	-0.4	6.2	-0.3	6.6	-0.2
Ethical, social and environmental responsibility	6.2	-	6	-	5.9	-	7.2	-	6.4	-
Creativity and innovation	5.8	1.1	6.1	0.8	6.2	0.2	5.8	0.8	6	0.6
English proficiency	4.4	0.4	3.9	0.7	4.2	-0.8	3.8	0.2	4.4	0.2

Note: the colours indicate the size of the difference between the 2023 and 2020 values. Dark green means a positive increase of more than one point; light green, a positive increase between 0.1 and 0.9; and yellow, a decrease between 0.1 and 0.9 points.

> Education shortfall = room for improvement

Figure 56. Education surplus or shortfall in 2023 (scale of 0 to 10)

Note: education surplus is a positive difference between graduates' average rating of the education they received on a specific skill and the usefulness of this skill in the workplace (i.e. when graduates feel that the skill was worked on more during the bachelor's degree than it is useful on the job). Education shortfall is a negative difference. This figure is calculated only for bachelor's degree graduates performing university-level functions at work.

English proficiency suffers the greatest shortfall between the education provided and the usefulness of this skill in the workplace

> This is closely followed by written expression, planning and organisation, and problem solving.

> The remaining skills have shortfalls of no more than 1.2 point out of 10.

> According to graduates, theoretical knowledge is worked on more during the bachelor's degree than it is useful in the workplace.

Table 4. Education surplus or shortfall in 2023 by field of knowledge (scale of 0 to 10):

	Humanities	Social Sciences	Experimental Sciences	Health	Engineering
Theoretical knowledge	0.57	0.40	0.74	-0.12	0.47
Practical skills	-0.97	-1.05	-0.57	-0.83	-0.92
Oral expression	-1.00	-1.02	-1.55	-1.06	-1.57
Written expression	-1.05	-1.57	-1.82	-1.27	-2.16
Teamwork	-0.81	-0.56	-0.93	-0.57	-0.74
Problem-solving	-1.70	-1.57	-1.12	-1.29	-1.11
Creativity and innovation	-0.90	-0.92	-1.41	-0.92	-0.87
Critical thinking	-0.13	-0.72	-0.92	-0.91	-1.01
Technological and digital skills	-1.74	-1.53	-1.15	-0.95	-0.90
English proficiency	-2.01	-1.61	-3.04	-1.54	-3.07
Ethical, social and environmental responsibility	-0.71	-0.60	-0.73	-0.59	-0.62
Planning and organisation	-1.63	-1.31	-1.78	-1.28	-1.50
Ability to find and manage information	-0.14	-0.39	-0.61	0.06	-0.65
Autonomous learning	-0.57	-0.74	-0.75	-0.72	-0.60

Note: education surplus is a positive difference between graduates' average rating of the education they received on a specific skill and the usefulness of this skill in the workplace (i.e. when graduates feel that the skill was worked on more during the bachelor's degree than it is useful on the job). Education shortfall is a negative difference. This figure is calculated only for bachelor's degree graduates performing university-level functions at work.

The English proficiency shortfall is particularly evident in Humanities, Sciences and Engineering

> Planning and organisation, problem-solving, and written expression fall considerably short across all fields of knowledge. Engineering graduates fall particularly short on the latter skill.

> There is significant room for improvement in technology skills in Humanities, Social Sciences, and Experimental Sciences.

> Further studies

Figure 57. Trend in the percentage of bachelor's degree graduates pursuing further studies by programme type

Legend: ● Postgraduate, master's or doctoral degree ▲ Bachelor's degree ■ Other ◆ No further studies
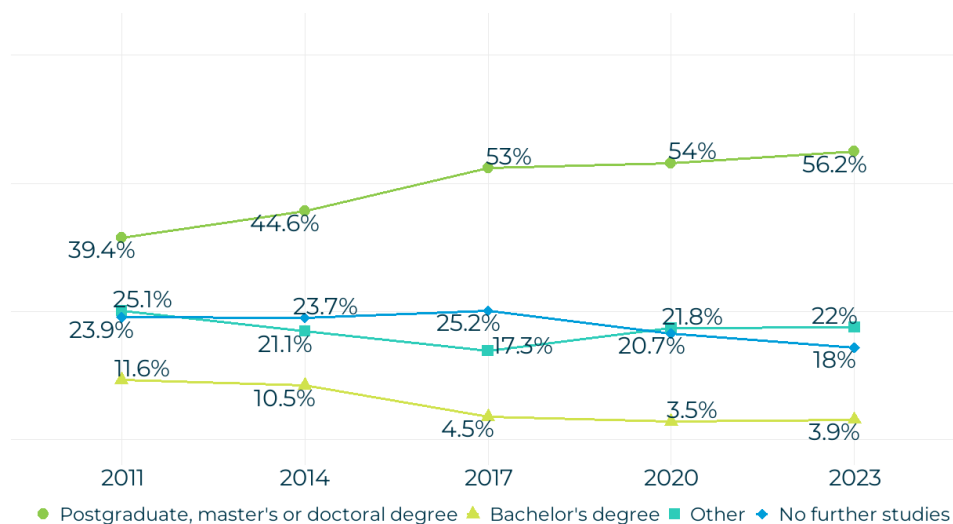
Figure 58. Percentage of graduates pursuing further studies by field of knowledge (2023)
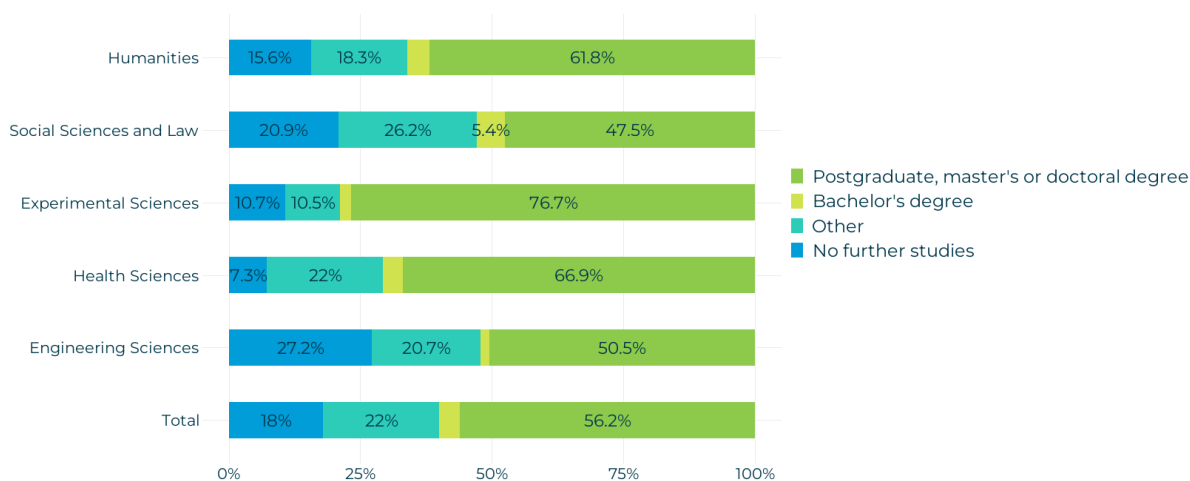
Legend: ■ Postgraduate, master's or doctoral degree ■ Bachelor's degree ■ Other ■ No further studies

The proportion of bachelor's degree graduates who pursue further studies continues to grow with each new survey

> Almost 6 out of 10 choose to study a postgraduate, master's or doctoral degree, an increase of more than four percentage points compared to 2020.

> Social Sciences and Engineering have the lowest percentages of graduates pursuing further studies.

> The opposite is true for Sciences, where around 80% continue their education after their bachelor's degree.

Detailed information on the subfields

> Significant differences between subfields

Figure 59. Comparison of employment indicators and quality of education by specific subfield (2023)[13]

	% employed	% performing university-level functions	% working full-time	% on a permanent contract	% with earnings above 2,000€/month	Occupationali quality index	% would choose the degree again
History							
Philosophy and Humanities							
Linguistics, Classics and Comparative Lingu							
Catalan and Spanish Philology							
Philology in Foreign Languages							
Fine Arts							
Art and Design							
Joint Programmes (Humanities)							
Economics							
Business Administration							
Tourism							
Law							
Labour and Security Studies							
Politics							
Sociology, Geography							
Communication							
Documentation							
Early Childhood, Primary and Secondary T							
Pedagogy and Psychopedagogy							
Work and Social Education							
Joint Programmes (Social Sciences)							
Biological Sciences							
Earth Sciences							
Chemistry							
Physics and Mathematics							
Sport and Nutrition							
Nursing							
Healthcare							
Psychology							
Therapy and Rehabilitation							
Medicine and Dentistry							
Pharmacy and Biomedicine							
Architecture							
Construction							
Construction Engineering							
Civil Engineering							
Naval Engineering							
Aeronautical Engineering							
Automation and Industrial Electronic Engi							
Mechanical Engineering and Industrial De							
Chemical Engineering and Materials Scien							
Industrial Engineering and Organisation							
Telecommunications							
Informatics							
Agriculture and Forestry							
Veterinary and Food Production							
Joint Programmes							

[13] The indicator represents the result of hypothesis testing for the difference of population means between two groups (the specific subfield vs the remainder). We consider equality of population means as our main contrast or null hypothesis. Bootstrapping was performed with a confidence level of 95%. Absences of significant difference are shown in yellow, higher scores for the subfield are shown in green and lower scores for the subfield are shown in red.

> Occupational quality index (OQI) ranking

Figure 60. Specific subfield ranking (*n* > 10) according to the OQI in 2023 (unweighted)

	$\overline{x}$
Medicine and Dentistry	79.0
Computer Science	78.2
Electronic and Automation Engineering	77.9
Telecommunications	77.7
Industrial Engineering and Organisation	76.5
Business Administration	76.3
Civil Engineering	76.3
Economics	75.5
Aerospace Engineering	75.2
Mechanical Engineering and Industrial Design	75.2
Building	74.9
Construction Engineering	73.6
Physics and Mathematics	73.1
Architecture	72.9
Law	72.7
Nursing	72.6
Pharmacy and Biomedicine	72.5
Agriculture and Forestry	72.3
Chemical and Materials Engineering	72.1
Veterinary Science and Food Production	72.0
Healthcare	71.0
Marine Engineering	70.9
Chemistry	70.0
Documentation	67.2
Biological Sciences	67.1
Psychology	66.2
Labour and Security	65.5
Therapy and Rehabilitation	65.3
Social Education and Work	65.1
Art and Design	65.0
Tourism	64.4
Pedagogy and Educational Psychology	64.3
Teaching: Education and Teacher Training	63.6
Communication	63.4
Earth Sciences	63.4
Political Science	62.1
Sport and Nutrition	61.6
Foreign Languages and Literature	61.0
Catalan and Spanish Language and Literature	59.6
Philosophy and Humanities	54.3
Sociology and Geography	52.9
Linguistics and Classical and Comparative Studies	52.7
History	50.8

Fine Arts	46.9

> Subfield ranking according to graduates' satisfaction with their bachelor's degree

Figure 61. Specific subfield ranking ($n > 10$) according to whether graduates would choose the bachelor's degree again in 2023 (unweighted)

Medicine and Dentistry	87.7%
Catalan and Spanish Language and Literature	82.5%
Teaching: Education and Teacher Training	82.2%
Construction Engineering	81.8%
Nursing	81.6%
Physics and Mathematics	81.4%
Computer Science	79.9%
Psychology	78.4%
Law	77.9%
Veterinary Science and Food Production	77.9%
Agriculture and Forestry	77.3%
Pharmacy and Biomedicine	75.6%
Philosophy and Humanities	74.9%
Healthcare	74.1%
Civil Engineering	74.1%
Industrial Engineering and Organisation	72.9%
Documentation	72.4%
Electronic and Automation Engineering	71.3%
Social Education and Work	70.9%
Chemistry	70.6%
Chemical and Materials Engineering	69.8%
Biological Sciences	69.2%
Mechanical Engineering and Industrial Design	68.9%
Telecommunications	68.8%
Pedagogy and Educational Psychology	68.1%
Business Administration	67.8%
Architecture	67.7%
Therapy and Rehabilitation	67.6%
Earth Sciences	66.4%
Building	66.2%
History	65.7%
Economics	63.9%
Sport and Nutrition	62.6%
Sociology and Geography	62.5%
Labour and Security	62.1%
Art and Design	61.3%
Aerospace Engineering	60.5%
Marine Engineering	59.9%
Fine Arts	58.9%

Employment outcomes of bachelor's degree graduates from Catalan universities

Foreign Languages and Literature	57.8%
Linguistics and Classical and Comparative Studies	55.6%
Communication	53.2%
Political Science	50.6%
Tourism	38.7%

> Subfield distribution by employment outcome and graduates' satisfaction with their bachelor's degree

Figure 62. Distribution of subfields according to the percentage of graduates in unemployment (only those active in the labour force) and those who would choose the same bachelor's degree again (the horizontal and vertical lines indicate the average percentages)
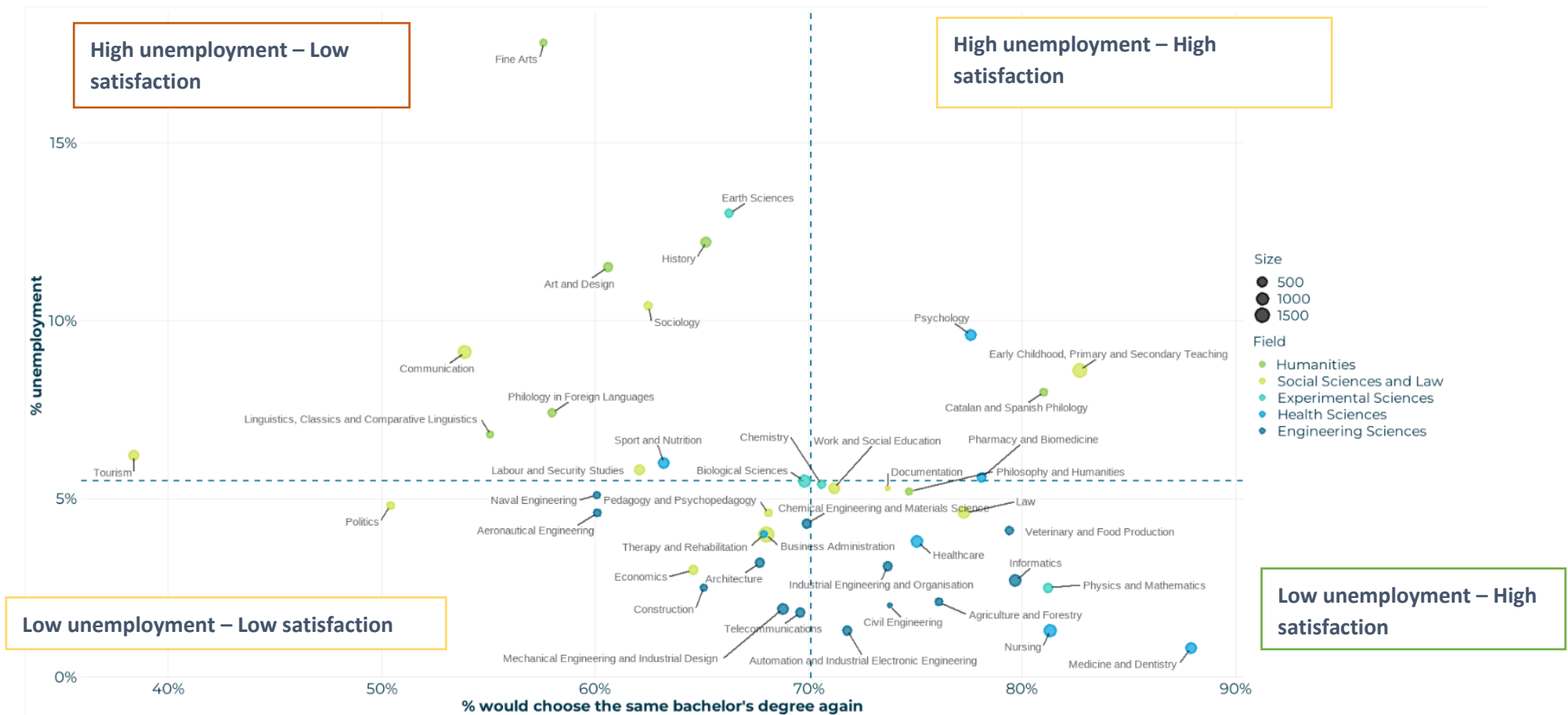
Employment outcomes of bachelor's degree graduates from Catalan universities

Figure 63. Distribution of subfields according to the percentage of graduates not performing university-level functions at work (overqualification) and those who would choose the same bachelor's degree again (the horizontal and vertical lines indicate the average percentages)
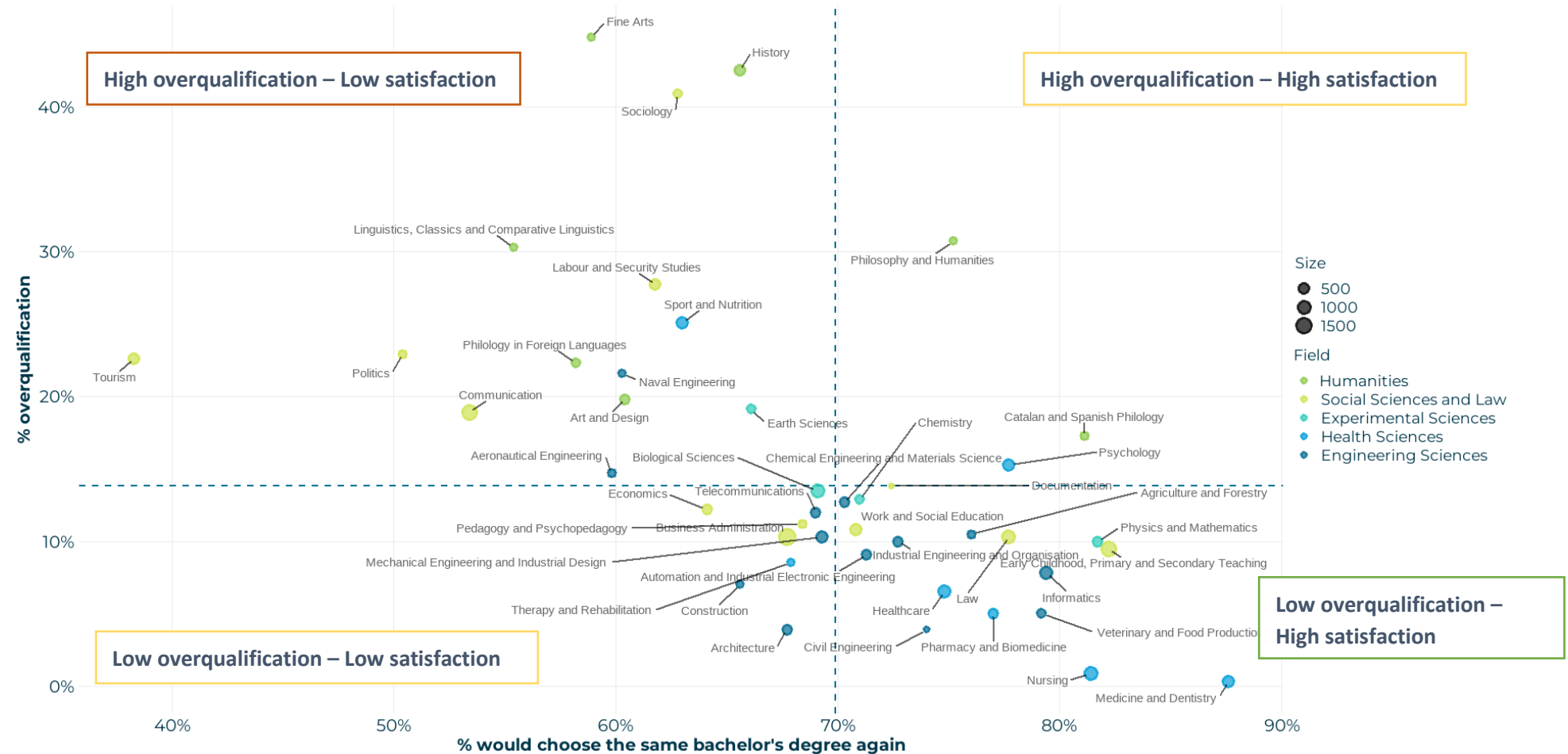
Gender perspective

> Differences in employment outcome by gender

Figure 64. Comparison of indicators by gender for each specific subfield (2023)[14]

	% employed	% performing degree-specific functions	% permanent contract	% working full-time	Gross monthly earnings	Job satisfaction	Occupational quality index
History		H	D	H	H		H
Philosophy and Humanities				D			
Linguistics, Classics and Comparative Linguistics					H		
Catalan and Spanish Philology					H		H
Philology in Foreign Languages	D	H					
Fine Arts							
Art and Design				H	H	H	H
Economics	D		H	H	H		
Business Administration		D		H	H		H
Tourism	H		D		H	H	
Law					H		
Labour and Security Studies			H	H	H	H	H
Politics			D				
Sociology, Geography					H	H	H
Communication			D	D			
Documentation							
Early Childhood, Primary and Secondary Teaching					H		
Pedagogy and Psychopedagogy				H	H		
Work and Social Education		D			H		
Biological Sciences		H	D		H		
Earth Sciences	H	D	D				
Chemistry					H		
Physics and Mathematics				D			
Sport and Nutrition							
Nursing	H	D			H		H
Healthcare					H	H	H
Psychology		D		H	H		
Therapy and Rehabilitation		H	H				H
Medicine and Dentistry					H	H	H
Pharmacy and Biomedicine		H				H	H
Architecture				H	H		
Construction				H	H	H	H
Construction Engineering	0		H	D	H		
Civil Engineering			H		H	D	
Naval Engineering			D				
Aeronautical Engineering	D						
Automation and Industrial Electronic Engineering							
Mechanical Engineering and Industrial Design		H			H		
Chemical Engineering and Materials Science							
Industrial Engineering and Organisation							
Telecommunications				H			
Informatics	H	H	H	H	H	H	H
Agriculture and Forestry			D			H	
Veterinary and Food Production			D		H	H	H

[14] The indicator represents the result of hypothesis testing for the difference of population means between two groups (women vs men for each subfield). We consider equality of population means as our main contrast or null hypothesis. The t-test was performed with a confidence level of 95%. D = higher value for women; H = higher value for men.

Of the statistically significant gender differences in employment, most favour men

> Within educational subfields, there are many significant differences in favour of men.
> The indicator columns with the most subfields showing a significant difference in favour of men are job suitability and gross monthly earnings, as well as the occupational quality index, which partly depends on the other two.
> Most significant differences in favour of women are linked to a higher percentage of permanent contracts.

Online university

> Graduate profile

Table 5. Trend in the characteristics of online university graduates

	2011	2014	2017	2020	2023
Average age and standard deviation at the time of the survey	39.2 (7.3)	40.9 (8)	40.5 (8)	40.5 (8.9)	40.6 (9.3)
Admission qualification					
Upper secondary school, vocational	16.1%	14.3%	18.5%	26.1%	31.1%
Incomplete university studies	14.8%	14.8%	13%	10.1%	15.5%
Already in possession of a higher	61.4%	60.8%	56.1%	46%	24.3%
Entrance exam for over 25s	2.7%	4.6%	4.7%	6.5%	8.4%
University Entrance Examination (PAU)	5.1%	5.4%	7.8%	11.2%	20.7%
Employment during the degree					
Full-time student	3.5%	2.4%	3.7%	6.2%	6.3%
Worked in a related job	62.6%	63.7%	58.2%	51.3%	50.9%
Worked in an unrelated job	34%	34%	38.2%	42.5%	42.9%
Started current job after graduation	32.8%	29.7%	37.7%	44.7%	51.3%

Graduates of the online university are still older, but the admission profile has changed: a minority of graduates were admitted with a higher education degree

> The average age of these graduates at the time of the survey was 40.6, compared to 27.3 for graduates of the traditional universities.
> The trend identified in previous studies has continued and grown. Indeed, we continue to see an increase in the percentage of students admitted to online bachelor's degrees after taking the University Entrance Examination (PAU) or completing non-university post-compulsory education. The 10-point increase in the percentage of students admitted from the PAU is especially noteworthy.
> There has also been a change in terms of graduates' employment during and after their studies. The percentage of students who worked in a related job during their bachelor's degree has decreased since 2011 (from 62.6% in 2011 to 50.9% in 2023). Meanwhile, the percentage of graduates who started their current job after graduation has increased (from 32.8% in 2011 to 51.3% in 2023).
> These student characteristics influence the figures presented below and their comparison with traditional universities.

> Employment characteristics

Figure 65. Employment trend by field of knowledge (2011–2023)

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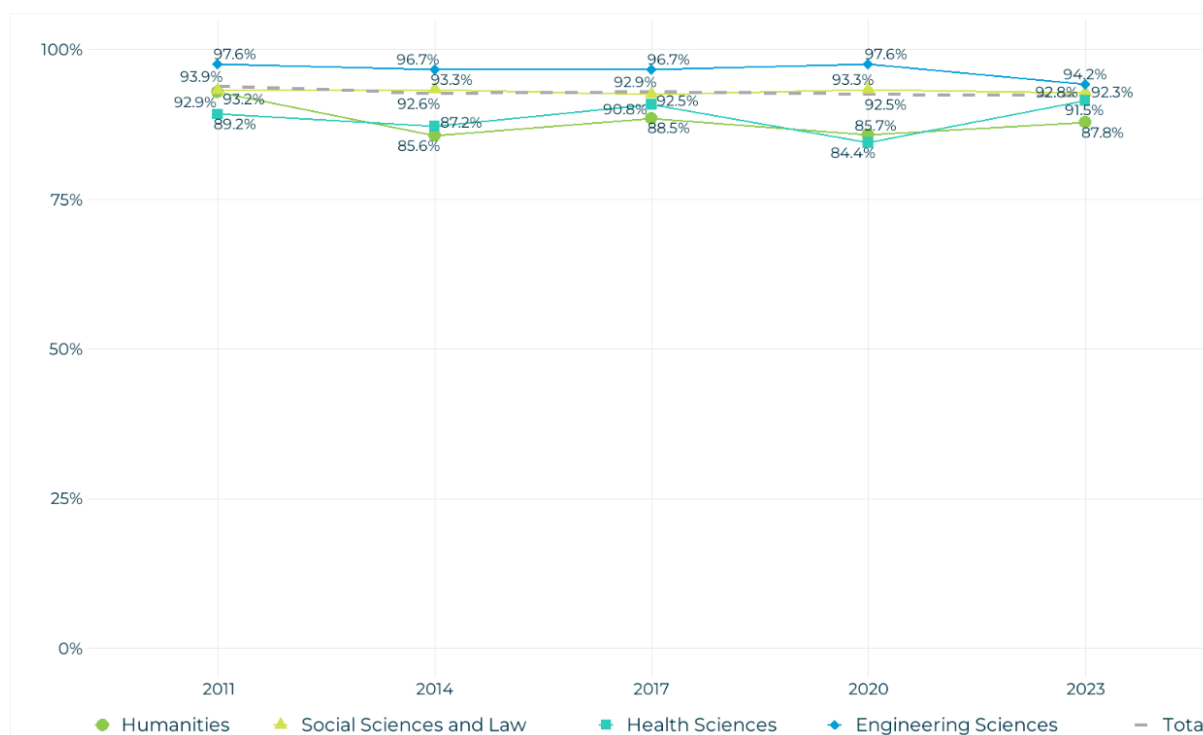
Graduates from the online and traditional universities have similar employment rates

> The rate of employment has remained relatively stable over the last five surveys. There are small variations between fields of knowledge: Engineering has the highest employment rate in 2023 (94.5%) and Humanities has the lowest (88.2%).

....

Online university graduates generally enjoy greater stability than traditional university graduates (71.1% vs 64%)

> It should be noted, however, that graduates of the online university tend to be older (14 years older on average), more senior in their current jobs and more likely to have a higher education degree prior to their bachelor's degree. On average, the online university graduates started their current jobs 8.7 years ago, six years earlier than their traditional university counterparts.

> The labour reform does not appear to have had an impact on contract type among the online university graduates.

> This factor varies considerably by field of knowledge: according to the 2023 data, Engineering has the highest rate of permanent contracts (81.6%) and Health has the lowest (58.8%).[15]

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[15] The only bachelor's degree in the field of Health at the online university is in Psychology.

> The overall percentage of graduates on permanent contracts has been decreasing since 2011, with the largest drop in 2014, especially for graduates in Humanities and Social Sciences.

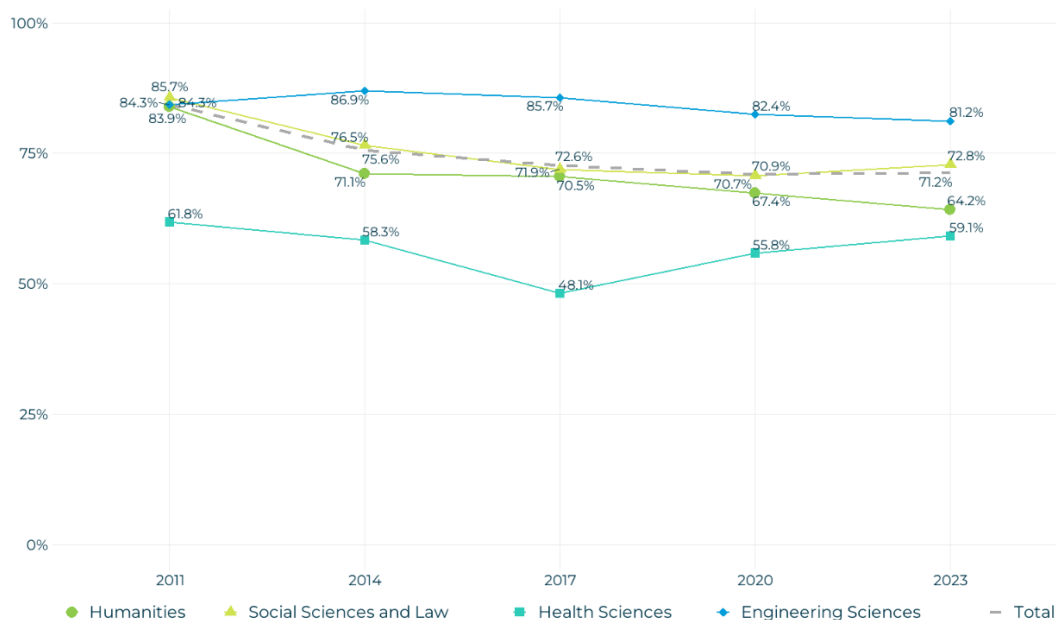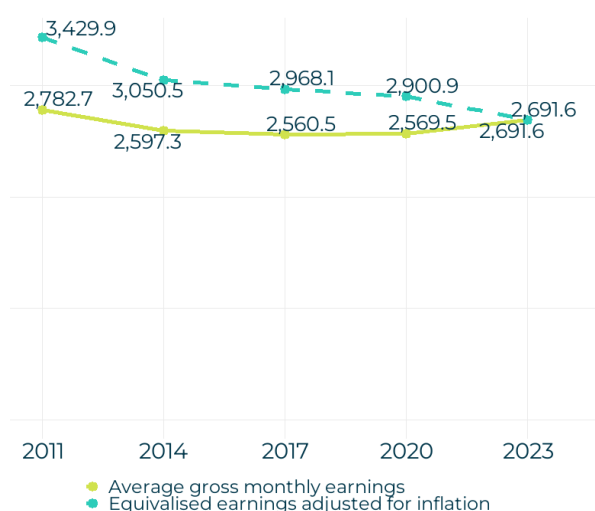**Figure 66. Trend in the percentage of graduates on permanent contracts by field of knowledge (2011–2023)**

Figure 67. Average salary of graduates working full–time in Spain, adjusted for inflation (2011–2023)

- Average gross monthly earnings
- Equivalised earnings adjusted for inflation

•••

On average, graduates from the online university earn roughly €400 more than their traditional university counterparts
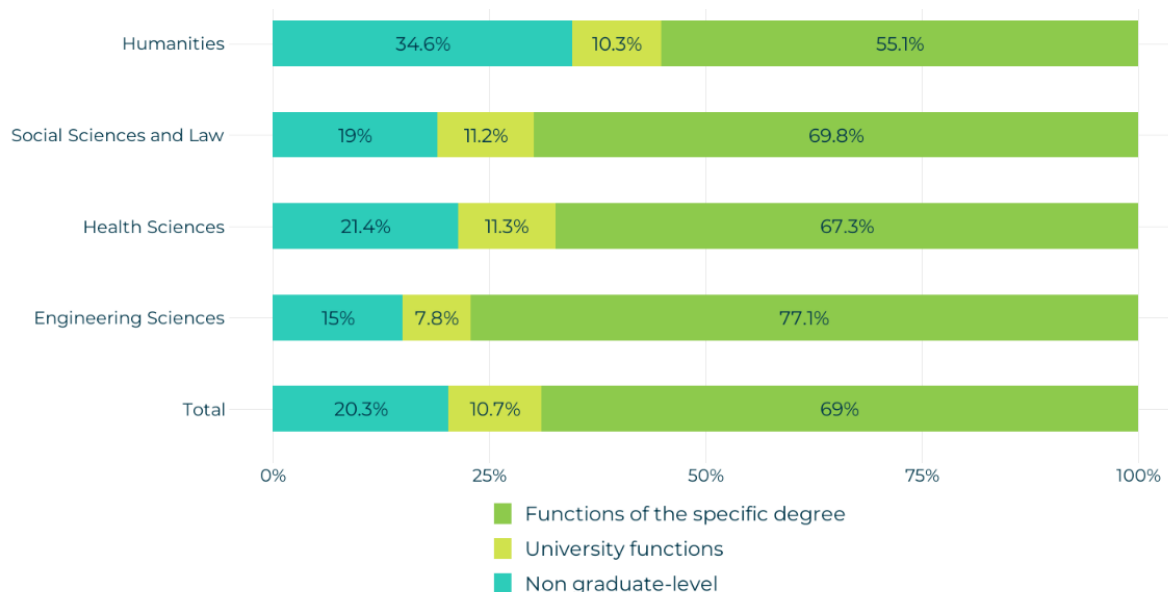
> Again, this may be explained by the fact that the online university graduates are older, more experienced and more senior in their jobs on average.

> However, the purchasing power of the online university graduates has diminished over the study period.

> Job suitability

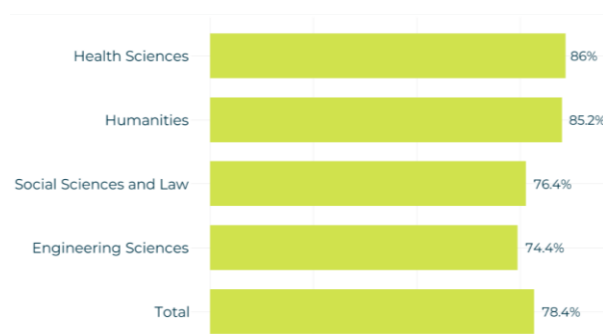**Around 8 out of 10 employed graduates perform degree-specific or university-level functions at work**

> However, there is notable variation between knowledge fields: job suitability is higher for Engineering graduates than for Humanities or Health graduates.

Figure 68. Functions performed by graduates at work by field of knowledge (2023)

Legend:
- Functions of the specific degree
- University functions
- Non graduate-level

Humanities: 34.6% / 10.3% / 55.1%
Social Sciences and Law: 19% / 11.2% / 69.8%
Health Sciences: 21.4% / 11.3% / 67.3%
Engineering Sciences: 15% / 7.8% / 77.1%
Total: 20.3% / 10.7% / 69%

> Would graduates choose the same bachelor's degree again

Figure 69. Percentage of graduates who would choose the same bachelor's degree again (2023)

Health Sciences: 86%
Humanities: 85.2%
Social Sciences and Law: 76.4%
Engineering Sciences: 74.4%
Total: 78.4%

Nearly 80% of graduates would choose the same bachelor's degree again

> Health graduates are especially satisfied with their bachelor's degree (Psychology), almost 9 out of 10 saying they would choose it again.

> Level of education and usefulness for work

Figure 70. Graduates' rating of the level of education they received with respect to certain cross-disciplinary skills (all graduates) and the usefulness of these skills for work (only employed graduates performing university–level functions) in 2023 (scale of 0 to 10)

....
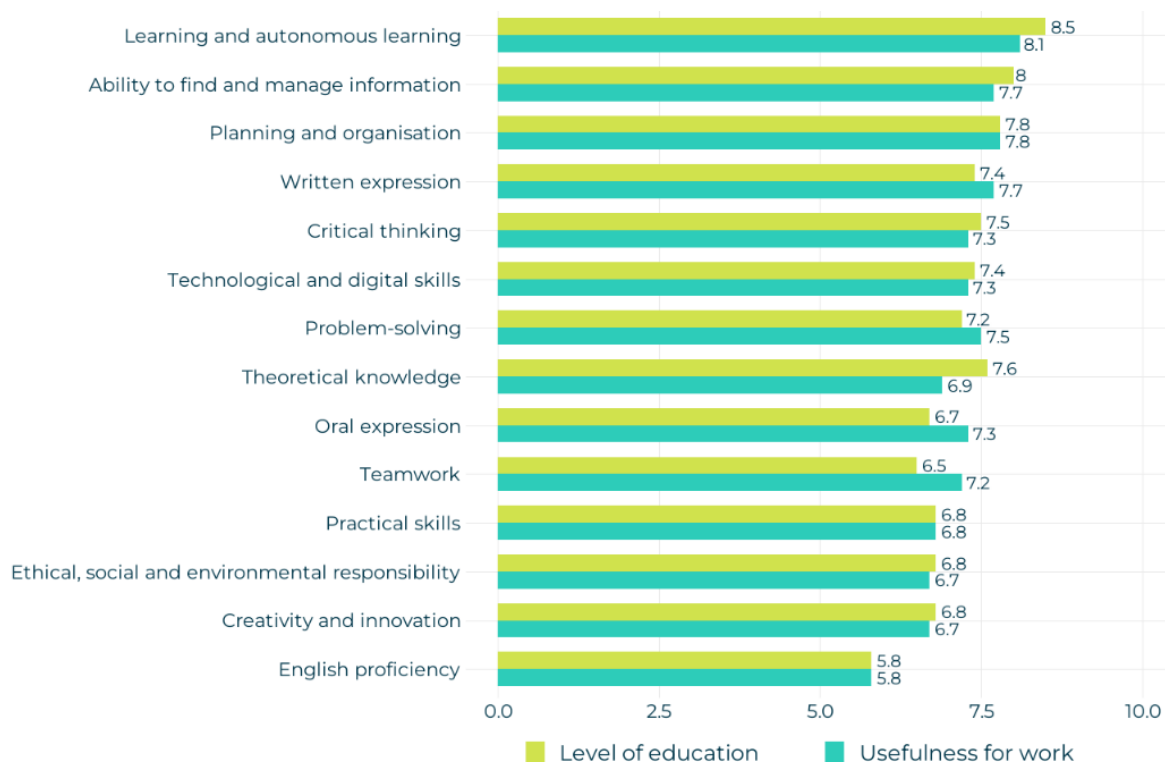
The level at which graduates are educated in certain skills strongly correlates with how useful those skills become in the workplace

> Learning and autonomous learning, the ability to find and manage information, and planning and organisation are the most highly rated cross-disciplinary skills.

> As with their traditional university counterparts, graduates of the online university rate English proficiency the lowest, although this rating is in line with how useful they consider this skill to be for work.

> The education shortfall is generally very small, except in oral expression and teamwork. Graduates rate the usefulness of these skills for work to be 0.6 and 0.7 points higher, respectively, than the level of education they received.

Figure 71. Trend in the level of education received by bachelor's degree graduates of the online university (2020-2023)

There has been a positive increase in the level of skills acquired by graduates of the online university[16]

> Oral expression (0.9 points), creativity and innovation (0.6 points) and English proficiency (0.6 points) have improved the most.

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[16]The rating scale on which this information is collected was changed in the 2023 employment outcomes survey (from a scale of 1 to 5 in 2020 to a scale of 0 to 10 in 2023). It is possible that these changes are due to the change of scale. This graph should therefore be interpreted with caution.

Comparison between levels of higher education

> Results by level of higher education

Figure 72. Employment rate, full–time work and gross monthly earnings according to graduates' level of higher education (2023)
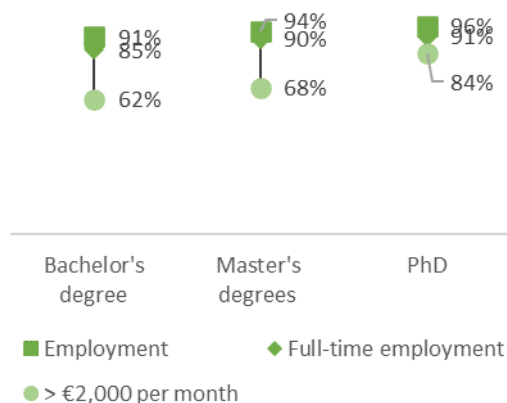

- Employment
- Full-time employment
- > €2,000 per month

Figure 73. Functions performed at work according to graduates' level of higher education (2023)

- Non-university-level functions
- University-level functions
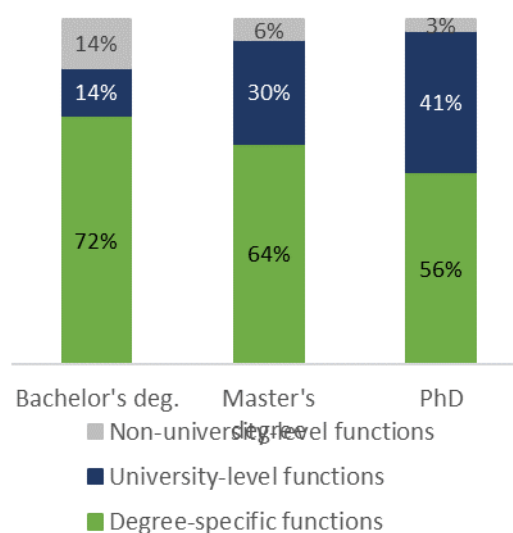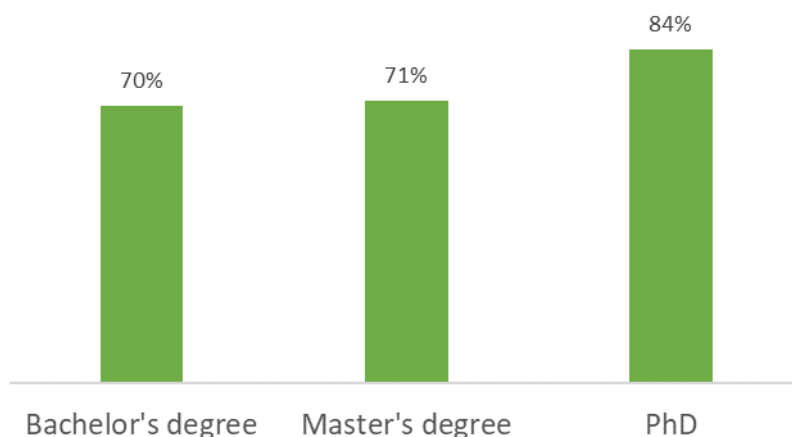- Degree-specific functions

Figure 74. Percentage of graduates who would choose the same degree again according to their level of higher education (2023)

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The higher the education level, the better the employment indicators

> This is true for the rate of employment and gross monthly earnings. In terms of job suitability, while the proportion of graduates performing degree-specific functions decreases as the level of education increases, almost no one at the higher levels performs non-university-levels functions.

> Similar proportions of graduates are satisfied with their bachelor's degrees and master's degrees, although this figure is considerably higher for doctoral graduates.

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DATA SHEET

Survey of bachelor's degree graduates from traditional universities[17]
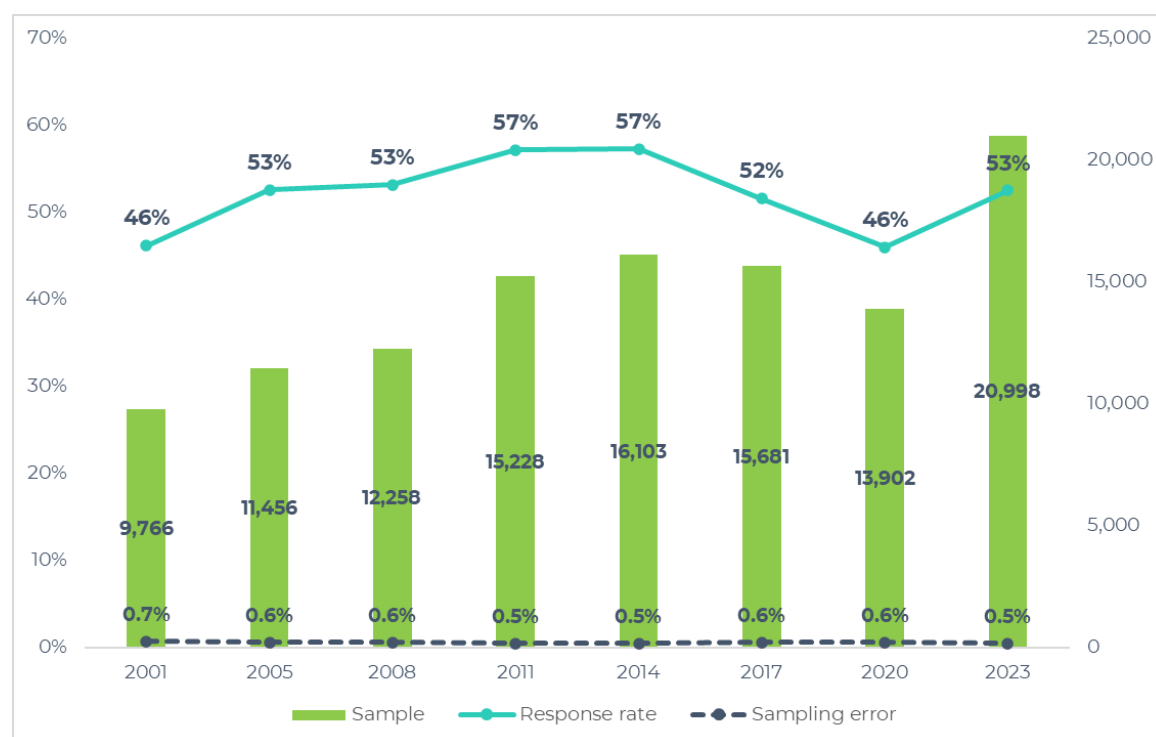
Population	People who graduated from a bachelor's degree in the 2018-2019 and 2019-2020 academic years. For Medicine, the cohorts included in the study were from the 2015-2016 and 2016-2017 academic years
Survey period	Fieldwork combining two survey methods: - online, from 07/11/2022 to 04/12/2022 - telephone, from 23/01/2023 to 05/05/2023
Average time taken to complete the survey if working	Online phase: 8' 33'' Telephone phase: 14' 53''
Participating universities	UB, UAB, UPC, UPF, URL, UdL, UdG, URV, UVic-UCC, UIC, UAO CEU

Population and sample data for bachelor's degree graduates from traditional universities (2023)

	Population	Contactable population	Sample	Response rate	Sampling error
University of Barcelona (UB)	9,039	9,038	4,896	54.2%	1.0%
Autonomous University of Barcelona (UAB)	6,875	6,875	3,890	56.6%	1.1%
Technical University of Catalonia (UPC)	4,608	4,608	2,439	52.9%	1.4%
Pompeu Fabra University (UPF)	3,808	3,807	2,012	52.9%	1.5%
Ramon Llull University (URL)	2,953	2,952	1,539	52.1%	1.8%
University of Lleida (UdL)	2,400	2,400	1,265	52.7%	1.9%
University of Girona (UdG)	3,632	3,632	1,710	47.1%	1.8%
Rovira i Virgili University (URV)	3,335	3,335	1,584	47.5%	1.8%
University of Vic - Central University of Catalonia (UVic-UCC)	1,881	1,881	916	48.7%	2.4%
International University of Catalonia (UIC)	970	969	464	47.9%	3.4%
Abat Oliba CEU University (UAO CEU)	528	528	283	53.6%	4.1%
TOTAL	40,029	40,025	20,998	52.5%	0.5%

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[17] The data presented in this report are weighted according to stratified sampling by specific subfield and sampling unit.

Figure 75. Trend in the survey sample, response rate and sampling error (traditional universities)

Survey of bachelor's degree graduates from the online university[17]

Population	People who graduated from a bachelor's degree in the 2018-2019 and 2019-2020 academic years
Survey period	Fieldwork combining two survey methods: - online, from 07/11/2022 to 04/12/2022 - telephone, from 31/01/2023 to 20/03/2023
Average time taken to complete the survey if working	Online phase: 8' 51'' Telephone phase: 14' 30''
Participating university	Universitat Oberta de Catalunya (UOC)

Population and sample data for bachelor's degree graduates from the online university (2023)

	Population	Contactable population	Sample	Response rate	Sampling error
Universitat Oberta de Catalunya (UOC)	2,185	2,185	1,129	51.7%	2.1%

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