

25th Report 2022 Graduates' Profile

2023 Summary Report

Supported by



Summary of the 25th Survey on the 2022 Graduates' Profile (2023 AlmaLaurea Report)

The Graduates' Profile takes into account 281,095 graduates in the calendar year 2022¹ from 77 of the 80 universities participating in AlmaLaurea as of June 2023.² These Universities are distributed throughout the country with a certain homogeneity: 28 in the North, 23 in the Centre, 26 in the South. In 2022 six Universities (Sapienza University of Rome, Bologna, Turin, Padua, Naples Federico II and University of Milan) had more than 10,000 graduates. The population of graduates breaks down as follows: 155,131 first-level graduates (representing 55.2% of all graduates in 2022), 31,874 single-cycle second level graduates (11.3%), 94,090 two-year masters (33.5%).³

The five largest fields of study (economics; health and pharmacy; engineering and engineering trades; natural sciences, mathematics, physics and statistics; politics, social sciences and communications) together account for almost 60% of graduates. Most fields of study include a "3+2" structure, while six of them also have single-cycle second-level graduates. The questionnaire was completed by 263,412 graduates, representing 93.7% of the total population surveyed.

The documentation presented is analysed by degree type, each of which is characterised by a different frame by field of study.

Single-cycle second level and first-level courses of study are the only ones that can be accessed with a high school/secondary school diploma. The first-level courses include 15 fields of study, with a greater concentration in economics (15.7%); health (12.4%); engineering and engineering trade (12.0%); natural sciences, mathematics, physics and statistics (10.5%) and political-social and communication (10.4%). The single-cycle second-level courses of study (lasting at least five years) are concentrated in a few fields: health and pharmacy (45.8%), law (30.6%), education (14.8%, with only the degree class in Primary Schooling Sciences), architecture and construction (6.4%), veterinary (2.2%), humanities and literature (in 2022, only 67 graduates - that is 0.2% - are in the Conservation and Restoration of Cultural Heritage course of study instituted by the Italian Ministerial Decree of 2 March 2011).

The two-year master's degrees are open to graduates who have already obtained at least a first-level degree. The two-year masters are found into 15 fields of study, most from four of them: economics (16.9%), engineering and engineering trade (15.8%), natural sciences, mathematics, physics and statistics (14.4%) and political-social and communications (10.1%). In the joint analysis by field of study and degree type, two-year master's degree in law and single-cycle second-level graduates in humanities and literature are not taken into consideration due to their small number.

Among 2022 graduates some effects of the pandemic first detected in the 2021 survey continue to be manifest. Specifically, study abroad decreased further as did the use of certain university facilities such as computer workstations, libraries, labs and individual study spaces. When analysing the 2022

¹ Since 2015, AlmaLaurea has also been carrying out annual surveys on the Profile and Occupational condition of PhD and Academic Master graduates. The results of the most recent surveys are available www.almalaurea.it/en/our-data/almalaurea-surveys.

² On an annual basis, the graduates involved in the survey make up approximately 90% of all graduates of Italian non-online Universities.

³ Graduates of courses of study before the reform of Italian Ministerial Decree no. 509/1999 and graduates of pre-reform course of study in Primary Education Sciences (before the reform of Italian Ministerial Decree no. 249/2010) were excluded from the Report due to the particularly low number of graduates (a total of 935). Documentation is available at www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-profile.

data, as with the data of 2021, it should be borne in mind that the effects of the pandemic particularly affected students who did a greater proportion of their university coursework during the pandemic. This is why the effects are more pronounced among shorter university courses, in particular among two-year and three-year master's degrees. Therefore, when presenting the results by degree type or field of study it is important to take into account the different effects of the pandemic on the various courses of study.

1. Gender and social background

1.1. Gender

Accounting for more than half of all graduates in Italy since the early 1990s, women represent 59.7% of all graduates in 2022. Such a share has tended to be stable over the last ten years. Women account for 68.2% of single-cycle second-level course of study, an appreciably higher proportion than what was observed among two-year master (57.3%) and first-level graduates (59.5%). As can be seen from these data, the share of female graduates tends to decrease in the transition from first-level degrees to two-year master's degrees. This trend among others is confirmed in the transition to the third level of university studies: the share of women among PhDs is just under 50% (49.1%).

There is a strong differentiation in the gender composition of the various fields of study, confirming the greater propensity of women to choose humanistic courses of study over scientific, in particular those of the STEM courses of study (science, technology, engineering, mathematics). In fact, in the first-level courses, women constitute a marked majority in education (93.2%), foreign languages (85.0%), psychology (81.8%), health (76.0%) and arts and design (71.8%). Conversely, they represent a minority in information and communication technologies (ICTs) (14.5%), engineering and engineering trades (27.0%) and sports sciences and physical education (33.4%). A similar distribution can also be observed within the two-year master's degree: there is a strong female prevalence in education (92.3%), foreign languages (85.6%), psychology (82.8%) and arts and design (72.9%), while there are very few in information and communication technologies (ICTs) (20.6%). In single-cycle second level degree women prevail in all fields of study: from 95.1% in education to 60.3% in architecture and construction.

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On the topic of gender differences, in January 2022 AlmaLaurea published the report "Laureate e laureati: scelte, esperienze e realizzazioni professionali" www.almalaurea.it/i-dati/le-nostre-indagini/indagini-tematiche/laureate-e-laureati-scelte-esperienze-e-realizzazioni-professionali (in Italian).

⁵ Even though the composition of AlmaLaurea's graduates in 2012 was different from the current class, both in terms of number of universities and of degree type (pre-reform of Italian Ministerial Decree no. 509/1999, first and second level), specific insights in the same number of participating universities confirmed the substantial constancy over time of the comparisons.

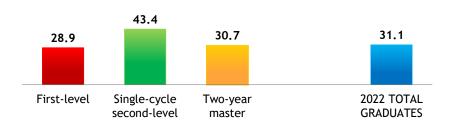
⁶ AlmaLaurea (2022), 7th Survey of PhD Profiles 2021. 2022 Report, www.almalaurea.it/en/our-data/almalaurea-surveys/phds-profile.

⁷ Graduates from the STEM area are those from the following fields of study: natural sciences, mathematics, physics and statistics; information and communication technologies (ICTs); architecture and construction; engineering and engineering trades.

1.2. Social background

With regard to social mobility, among the graduates analysed those from socio-culturally favoured family backgrounds are over-represented compared to the Italian population as a whole. This is supported by the fact that 14.1% of Italian men between 45 and 64 (the reference age group for fathers of graduates) obtained a university degree. But among the fathers of graduates surveyed by AlmaLaurea, this share is appreciably higher at 21.1%. The comparison between the Italian female population and the mothers of graduates leads to similar conclusions (respectively 16.1% and 22.3%). This means that the parents of university graduates more frequently obtained a university degree than the population of the same age as a whole. By jointly considering the education levels of both fathers and mothers analysed by AlmaLaurea, it was found that 31.1% have at least one parent with a university degree (27.2% in 2012). This share is 28.9% among first-level graduates, rises to 30.7% among two-year master graduates and 43.4% among single-cycle second-level graduates (Figure 1).

Figure 1 - 2022 graduates: at least one parent with a university degree obtained by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

In this respect, among those who have at least one parent with a university degree it is interesting to note the consistency between the parents' and the children's areas of study. Among these, 19.0% of them complete their studies in the same field of study as one of their parents. However, this share rises to 38.2% among single-cycle second-level graduates, it is within the degrees that most frequently lead to the self-employment (43.3% among graduates in health and pharmacy and 40.1% in law).

Graduates with a high social background (i.e. those whose parents are entrepreneurs, self-employed and managers) accounted for 22.8% in 2022 (21.2% among first-level graduates, 22.3% among two-year masters and 32.6% among single-cycle second-level graduates). Conversely, graduates with a less-favoured social background, whose parents perform blue collar occupations, are 22.3% (24.0% first-level graduates, 21.3% among two-year masters, only 16.6% among second-level graduates).

Although schematic, these data highlight the weight of social origin on the choices and possibilities of successfully completing a course of study. Enrolment in single-cycle second-level courses inevitably entails a higher level of investment than first-level degrees, an investment that will often continue with further specialisation courses. This is part of the reason why single-cycle second-level graduates

⁸ Elaborations based on Istat data (i.stat) with respect to the population by age and level of education. This age range is assumed to be the reference age for parents of graduates surveyed by AlmaLaurea.

represent a population with a relatively high social background, particularly those in the health and pharmacy and those in the veterinary. Moreover, the social background of two-year masters is higher than that of first-level graduates. In brief, graduates whose families are culturally favourable and more suited to supporting their children's studies are more likely to continue their studies.

2. Geographic origin and educational background

2.1. Geographical origin

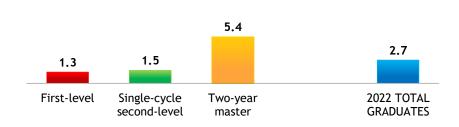
In 2022 43.6% of the graduates earned their degree in the same province where they graduated from high school/secondary school diploma, and more than a quarter moved to a neighbouring province. It therefore follows that 69.3% of the graduates studied at most in the province neighbouring the one where they got their secondary-school diploma. This phenomenon, which involves 74.3% of first-level graduates and 71.2% of second-level graduates, is less pronounced among two-year masters (60.3%). The choice to study 'close to home' is explained among others by the wide spread of university campuses, but also by the need of less favoured families to contain the costs of education (at most 73.5% of those from less advantaged backgrounds studied in the neighbouring province compared to 66.4% of graduates with a high social background). As the data also show, the choice to move for study reasons is more frequent in the transition from the first to the second level of study. In any case, it remains confirmed that mobility is tending to increase (the proportion of those studying in a province not neighbouring the one where they went to high school/secondary school has risen over the last ten years from 24.9% to 30.7%) and that the geographical distribution of the place where the high school/secondary school diploma was earned plays a relevant role in this phenomenon. In fact, mobility for study purposes has a very clear direction, which tends to be from the South to the Centre and North of Italy. 28.6% of graduates who obtained their degree in the South chose a university in a different geographic area (a percentage that is slowly but constantly increasing, it was 23.2% in 2013), compared with 13.9% of those who obtained their degree in the Centre and 3.6% of those who obtained their degree in the North. This perspective also confirms the greater propensity to travel for studies of graduates coming from more favoured contexts: focusing on the flow of graduates from the South who move to universities in the Centre-North, this share varies between 33.2% of those coming from more favoured contexts and 23.3% of those coming from less favoured contexts.

In 2022, 12,214 citizens from other countries graduated from one of the universities part of AlmaLaurea Consortium. Foreigners account for 4.3% of all graduates and are slightly increasing: they counted 3.0% in 2012. However, these are mostly young people belonging to immigrant families but living in Italy where 37.4% of graduates with non-Italian citizenship have obtained a high school/secondary school diploma in our country (29.9% in 2012). However, after a steady growth that lasted until 2018 (43.5%), the most recent trends show that the share of foreign graduates who are the children of immigrants residing in Italy has been declining in recent years of more than 6 percentage points. By taking into consideration the share of foreign citizens with a high school/secondary school diploma earned abroad, which probably identifies the segment of the population that moved to Italy at the time of the university choice, the value among the 2022 graduates is 2.7% and has slightly

⁹ As a matter of fact, almost all Italian provinces host one or more course of study.

increased in recent years (it was 2.1% in 2012). The value rises to 5.4% among two-year masters and decreases to 1.5% among single-cycle second-level graduates and 1.3% among first-level graduates (Figure 2).

Figure 2 - 2022 graduates: foreign citizens with high school/secondary school diploma abroad by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

While among foreign citizens as a whole, including those who graduated in Italy, almost half (44.7%) comes from Europe (in particular from Romania and Albania, 11.1% and 7.5% respectively), among foreign graduates who graduated abroad the share of those from Europe falls (30.7%) and the most represented country is China, with 9.8%, followed by India (8.1%) and Iran (7.6%). Foreign graduates with high school/secondary school diplomas abroad are more represented in specific fields of study such as architecture and construction (7.3%); information and communication technologies (4.5%); on the other hand, in two fields of study (education and sports sciences and physical education) less than 1.0% of foreign graduates earned their diplomas abroad.

2.2. Educational background

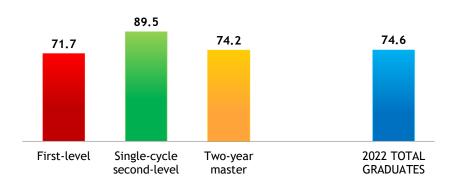
As for the educational background of graduates in 2022, a prevalence of high school diplomas (74.6%) is found, in particular for scientific high school diplomas (awarded by 39.3% of graduates) and high school diplomas in classical studies (13.2%). This is followed by technical secondary school diplomas (19.5%) while vocational diplomas are marginal (2.8%).

The share of graduates with a high school diploma has increased over the last ten years, rising from 71.4% in 2012 to 74.6% in 2022, particularly at the expense of graduates with a technical diploma, which fell from 23.5% to 19.5%. This is the result of a trend that saw graduates with a high school diploma increase until 2017 (when they stood at 76.9%), only to fall in more recent years. This recent contraction was matched by a slight upturn in technical and vocational graduates. It will be interesting to monitor future trends given the recent activation of technical university degrees aimed in particular at technical and vocational graduates with the aim of preparing professionals who are ready to enter the labour market. ¹⁰ Indeed, it should also be remembered that since 2010 there have also been Higher Technical Institutes, which offer highly specialised technical training to young people who do not wish to go on to study at the university.

¹⁰ The first-level graduates of 2022 include some graduates in vocational degree programmes, which were launched in the 2018/2019 academic year. However, it was only a very small number (218 graduates), so it is not possible to make any kind of analysis.

Focusing on graduates with a high school diploma, slight differences can be observed between first-level graduates and two-year masters, whereas single-cycle second-level graduates are strongly identified (Figure 3). Among the last-mentioned group of graduates, 89.5% have in fact a high school education mainly in scientific (47.4%) or classical studies (26.3%), compared to 71.7% of first-level graduates (from high school in scientific and classical studies, 36.4% and 10.0% respectively) and 74.2% of two-year masters (from high school in scientific and classical studies, 41.2% and 13.9% respectively).

Figure 3 - 2022 graduates: high school diploma (classical studies, scientific studies, foreign languages, human science, art, music and dance) by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

It is worth highlighting an important link between the type of high school diploma obtained and the field of university studies, which also shows a certain stability over time. If 36.4% of first-level graduates overall come from high school in scientific studies, such a background relates to the majority of graduates in engineering and engineering trades (67.4%) and natural sciences, mathematics, physics and statistics (59.8%). Conversely, graduates with a high school diploma in scientific studies are fewer among graduates from education (11.3%) and foreign languages (12.2%). Among first-level graduates, those with a high school diploma in classical studies (10.0% overall) are more common in humanities and literature (36.4%), psychology (16.4%) and arts and design (16.2%), while they represent a decidedly smaller share of first-level graduates in information and communication technologies (ICTs) and sports sciences and physical education (3.0% and 4.0% respectively). The scholastic background of the course of study is confirmed by the fact that even first-level graduates with a technical secondary school or vocational diplomas (26.7% overall) vary appreciably depending on the course of study: the percentage is relatively higher in information and communication technologies (54.7%), agricultureforestry (47.6%), economics (41.3%), and law (40.6%), while it is weaker in humanities and literature (9.3%), psychology (11.1%), natural sciences, mathematics, physics and statistics (18.0%) and arts and design (18.1%).

As previously mentioned, 47.4% of single-cycle second-level graduates came from high school in scientific studies; this percentage is over 60% among graduates in veterinary (65.8%) and those in health and pharmacy (63.7%). 26.3% of the single-cycle second level graduates come from classical high schools. This percentage rises to 39.8% among the graduates in law, while it is limited to 13.8% among the graduates of the architecture and construction and 14.1% among those studying education. Compared to the average for single-cycle second-level graduates (8.8%), the share of graduates with a

technical or professional qualification is higher among graduates from architecture and construction (16.8%), education (12.1%) and law (11.7%). This percentage is negligible among graduates in health and pharmacy (4.7%).

Although, two-year masters have an educational background that is quite similar to that of first-level graduates. That is to say those who obtained a diploma mostly in high schools (74.2%) and technical secondary school (18.0%) with similar differentiation by field of study, attention should be drawn to the fact that such students tend to have had more brilliant educational careers. The average graduation mark for two-year masters' graduates is 82.7 out of 100, compared to 81.2 for first-level graduates. This result, verified in most fields of study, confirms that the most prepared students tend to continue their studies after the first-level degree.

The high school/secondary school marks earned by 2022 first-level graduates were higher for graduates of the engineering and engineering trades (86.5) and natural sciences, mathematics, physics and statistics (84.3), both with a high presence of scientific high school graduates; but also humanities literature (84.5) and foreign languages (84.1), respectively with a high presence of classical and language high school diplomas. In contrast, high school marks were appreciably lower than the average among graduates of sports sciences and physical education (74.2), education (76.1), law (77.8) and political and social sciences and communications (78.7).

The high school diploma marks are even higher among single-cycle second level graduates, who on average earn 84.6 out of 100. The reasons for these particularly brilliant results can be partly attributed to the selection process for accessing courses with number-based admissions, which characterises single-cycle second-level course of studies more than others.

3. Experiences during university studies

According to the survey, experiences during university studies are mainly focused on study abroad, curricular internship experiences and work during studies.

3.1. Study abroad experiences

Study abroad experiences involve in all 9% of 2022 graduates. Focusing exclusively on the experiences gained during the course of study under review, first-level graduates tend to studying abroad less frequently (6.6%) than two-year masters (11.3%) and single-cycle second-level graduates (14.2%).

The share of graduates who gained study experience abroad during their course of study tended to remain stable until 2020 (12.5%) before falling back to 9.5% in 2021 and 9.0% in 2022. While graduates' answers refer to the entire study period, the decrease shown among graduates in recent years is most likely attributable to the pandemic, during which study abroad experiences came to a standstill due to the severe travel restrictions. This decrease affected all types of study abroad, above all two-year master graduates. Going into more detail, among the 2022 graduates' experiences of study abroad were in most cases (6.9%) in European Union programmes (Erasmus in first place), while the other experiences recognised by the course of study (Overseas, thesis abroad, etc.) and, above all, those involving a personal initiative were quite marginal. Combining the European Union programmes and other initiatives recognised by the course of study, 8.3% of all graduates have had this type of

experience (Figure 4). This share had slightly increased until 2020 when it stood at 11.3%, but for the reasons mentioned above in 2022 it returned to lower levels than in 2012.

Among the 2022 first-level graduates, this percentage is 5.9%, with a particularly marked peak in foreign language (18.3%) and above-average values in politics, social sciences and communications (9.8%) and economics (8.7%).

Among the single-cycle secondo-level graduates, the programmes abroad recognised by the course of study are relatively more widespread and affect 13.1% of graduates. Study abroad was particularly high for architecture and construction (20.9%), law (15.7%) and veterinary sciences (15.0%).

Two-year masters who during their second level benefited from studying abroad as part of initiatives recognised by the course of study account for 10.6%. These were joined by graduates who participated in study abroad programmes during the first-level course of study, for a total of 17.6% over the "3+2" years. The latter value shows a decrease compared to 2020 (when it was 21.0%). As was to be expected, study abroad during two-year master's studies were particularly strong for graduates in foreign languages (18.7%), but also among those from the engineering and engineering trades (14.1%), economics (12.9%), architecture and construction and politics, social sciences and communications (both 12.7%) groups. The pandemic particularly affected two-year master's course of study, among which the programme-recognised study experience decreased compared to 2020 graduates by almost 5 percentage points. The decline was smaller among single-cycle second-level graduates (in any case greater than 3 percentage points) and among first-level graduates (over 2 points). This result is inevitably linked to the duration of each degree type: it is worth remembering that the two-year master's graduates went through most of their experience (if not all) at the height of the pandemic.

FULL Graduates who ACADEMIC completed studies CAREER abroad during the 17.6 first-level, not for a two-year master 7.0 13.1 10.6 8.3 5.9 First-level Single-cycle Two-year **2022 TOTAL** second-level **GRADUATES** master

Figure 4 - 2022 graduates: study abroad recognised by the course of study by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Among graduates whose study abroad are recognised by their course of study, 82.6% took at least one exam that was validated on their return to Italy. Note that the lower participation in study abroad programmes, primarily due to the pandemic, did not affect the share of those who have taken exams abroad, which instead increased almost 10 percentage points over the last ten years. 25.1% of those who have completed a period of study abroad have also prepared a considerable part of their theses (a share that rises to 41.7% among two-year masters). This share has started to grow again after the

significant decrease recorded in 2020 and 2021 for the reasons already mentioned, and this is the case across all programmes (reaching 33.6% in 2021 among two-year masters).

Satisfaction with experiences abroad is very high, with rates consistently exceeding 95% in recent years. These are experiences that, aside from rounding out their personal background, allow them to acquire greater language skills. In fact, 91.3% of graduates who had a recognised study abroad know at least one foreign language with a self-assessment at a level equal to or higher than B2 in writing. Conversely, this share is 61.8% among those who had not such an experience. A specific analysis¹¹ shows that, all things being equal, those who completed a period of study abroad recognised by their course of study are more likely to be employed than those who never spent time abroad (+12.3%).

3.2. Internships

Curricular internships carried out and recognised by the course of study represent for Italian universities one of the strategic goals in terms of understanding and collaboration between universities and the economic system. For years, as shown by the in-depth studies carried out by AlmaLaurea, these experiences have represented a trump card for students to play on the labour market. Indeed, those who had a curricular internship are, all else equal, 4.3% more likely to be employed one year after obtaining their degree than those who have not carried out this type of activity.¹²

In 2022, 59.4% of graduates had a curricular internship (Figure 5). In 2012 they involved 56.0% of graduates, and after a few years of substantial stability, there was a steady increase from 2015 until 2019 (bringing this share to 59.9%), which was followed by a noticeable contraction (by almost 3 percentage points) between 2020 and 2021. In 2022 the share of graduates with this experience rose again (over 2 percentage points compared to 2021). Thus it seems that the slowdown in traineeships, probably attributable to the pandemic, has already been surpassed. 36.4% of graduates had their curricular internship in a non-university setting, 12.9% in a university setting and 9.4% had a job that was then recognised by their course of study. After the increase in experiences within the university and concurrent decrease in those outside in 2020 and 2021, this trend reversed last year suggesting a gradual return to normality after universities had tried to make up for the difficulties of companies hosting students in their facilities during the pandemic. Those who experienced a curricular internship show a high level of satisfaction: 94.1% of graduates expressed a positive opinion.

More specifically, the internship recognised by the course of study involved 58.5% of first-level graduates. In particular, 37.5% had these experiences in a non-university setting. Internships are part of the educational background of more than 80% of first-level graduates in education (92.5%), health (90.1%), agriculture and forestry (83.8%). The minority of graduates in engineering and engineering trades (29.3%) and humanities and literature (29.8%) are instead involved in internships. Among first-level graduates, however, internships were more common (68.9%) among those who did not intend to pursue further studies with a two-year master.

¹¹ AlmaLaurea (2023), 25th Survey on the Occupational Condition of Graduates. Summary of the 2023 Report, www.almalaurea.it/i-dati/le-nostre-indagini/condizione-occupazionale-laureati.

¹² AlmaLaurea (2023), 25th Survey on the Occupational Condition of Graduates. Summary of the 2023 Report, https://www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-employment-status.

Graduates who completed internships **FULL** only during the ACADEMIC first-level, not for a two-CAREER vear master 77.8 16.0 58.5 61.8 59.4 56.3 First-level **2022 TOTAL** Single-cycle Two-year second-level master **GRADUATES**

Figure 5 - 2022 graduates: internships recognised by the course of study degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Curricular internships are also frequent among two-year master's degree graduates, reaching 61.8%. Moreover, 16.0% of the two-year masters had an internship but during their first-level course of study, which brings the total percentage of two-year masters with internship experiences in their educational background to 77.8%. Graduates in sports sciences and physical education (88.2%), health (82.6%) and education (77.1%) are more committed to these activities, while those from humanities and literature (39.0%) and information and communication technologies (52.3%) are less so.

With reference to single-cycle second-level courses of study, curricular internships involved 56.3% of graduates, although the situations differ widely according to the field of study. As many as 86.5% of graduates in education engaged in these activities compared to 23.1% of those in law.

3.3. Work while studying

Over the past ten years there has been a decline in the share of graduates with work experience during their studies (from 70.3% in 2012 to 64.1% in 2022). This is the result of a more pronounced contraction until 2015, which was followed by a period of substantial stability until 2020 and a slight decrease thereafter. The decline is probably due to the combined effect of a number of factors, from the uncertain economic environment that characterised the decade under review to the more recent emergency created by the Covid-19 pandemic, which is also associated with the gradual decline in the proportion of the adult population enrolled in university studies. More specifically, in 2022 7.5% of graduates were studying-worker, i.e. they graduated after working steadily during their studies. ¹³

Working students, i.e. all the other graduates who have had working experience during their university studies, account for 56.6%. In contrast, the proportion of graduates without any type of work experience increased by more than 6 percentage points over the past 10 years, and in 2022 it reached 35.7%.

¹³ Working students are those who stated that they worked continuously on a full-time basis for at least half of the duration of their studies, both during and after lectures.

64.0% of first-level graduates performed some kind of work while studying. 6.3% were studying worker. Graduates who have had work experience are more frequent in sports sciences and physical education (80.6%), education (78.6%), law (74.7%), politics, social sciences and communications (73.7%) and agriculture and forestry (72.1%). This type of experience is less frequent - although they still involve more than half of the graduates - in engineering and engineering trades, health, information and communication technologies and natural sciences, mathematics, physics and statistics (53.5%, 54.9%, 56.1% and 56.6% respectively). Except for information and communication technologies (ICTs), these last groups show a very low percentage of studying work (oscillating between 2.6% and 4.0%), which are more predominant in law (23.1%), education (15.3%), politics, social sciences and communications and sports sciences and physical education (both 9.9%).

As shown previously, single-cycle second-level courses of study are attended more than others by young people from more favourable family backgrounds. Although family context influences working experience, which is often a source of funding for university studies, more than half of single-cycle second-level graduates (56.8%) are involved in working activities, ranging from 82.2% of graduates in education to 43.5% of graduates in health and pharmacy. It is true however that only 5.0% of single-cycle second-level graduates were for all intents and purposes studying worker.

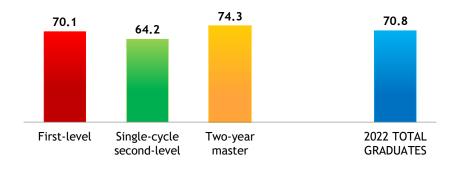
66.7% of two-year masters graduated were engaged in work experience during their studies. The share of studying worker stands at 10.4%, although it reaches decidedly substantive levels among graduates in health (41.2%) and education (30.7%).

4. Study circumstances

4.1. Lectures attendance

70.8% of 2022 graduates regularly attended classes for at least three quarters of the planned lessons: 70.1% for first-level graduates, 64.2% for single-cycle second level graduates and 74.3% for two-year master graduates (Figure 6). Note that this count includes lessons attended remotely, particularly those held during the pandemic. Lectures attendance has been growing slowly but steadily in recent years despite a slight decline in the last year: 68.0% of all graduates attended regularly in 2012, a share that peaked at 71.7% in 2021 and then decreased slightly to the aforementioned 70.8% in 2022.

Figure 6 - 2022 graduates: regular attendance of at least 75% of lectures by degree type (percentage values)



As already mentioned, 70.1% of first-level graduates stated that they regularly attended lectures. Here also there are relevant differences among individual fields of study. Lectures attendance is particularly high in health (89.2%), architecture and construction (84.3%), engineering and engineering trades (79.1%) and natural sciences, mathematics, physics and statistics (75.3%). Conversely, lectures attendance was relatively lower among graduates from education (50.2%), psychology (55.3%) and law (60.0%).

Overall, 64.2% of single-cycle second-level graduates reported having attended lectures regularly. However, this is the result of strongly differentiated situations by field of study: among architecture and construction students, attendance was decidedly broad and widespread (90.6%), while graduates in law, who make up 30.6% of the total number of single-cycle second-level courses of study, attend relatively little (only 45.1% attend lectures regularly).

The two-year master graduates were particularly diligent in their attendance (74.3%). Attendance varies appreciably according to field of study, from the highest in architecture and construction (86.9%), engineering and engineering trades (81.5%) and natural sciences, mathematics, physics and statistics (78.7%) to the lowest in education (45.2%).

93.1% of the 2022 graduates engaged in remote learning during the course of study they are completing (including lectures taken remotely during the Covid-19 pandemic), and of these 53.6% did so for more than half of the course's duration, 30.9% for between 25% and 50% of the course's duration and 15.3% for less than 25% of the course's duration. This result is the product of very diverse situations: for instance, the share of those who participated in remote learning for more than half of their studies stands at 69.6% among two-year masters, 50.4% among first-level graduates, and drops to 22.1% for single-cycle second level degree type.

4.2. Scholarships and other student support services

Among graduates in 2022, besides scholarships (26.1%) the services used at least once and provided by the right to education body were canteens/foodservice (28.1%), book loans (25.7%), transport subsidies (19.0%), aid for international mobility (14.2%), vouchers for the purchase of computer equipment and books (10.0% and 10.8% respectively), rent subsidies (8.5%), part-time work (7.5%) and housing (4.1%).

In general, graduates are satisfied with the student support services provided by the institution for the right to education, with peaks of 90.0% for the loan of books. Conversely, graduates are less satisfied with rent subsidies (61.7% satisfied).

As established by the Italian Constitution (art. 34, paragraphs 3 and 4), the scholarships are the main tool for providing financial support to students who are deserving and deprived of facilities to attend university. However, the coverage of the scholarship is not yet completed, despite improvements in recent years that have brought it to over 97% of those eligible, and it is not uniform throughout the country (i.e. in the South, the percentage of scholarship among those eligible is lower than the national average).

AlmaLaurea data show that the use of scholarships has grown slightly in recent years (almost 4 percentage points compared to 2012, the most marked increase in the last five years), probably as a

result of the most recent regulatory measures that have broadened the number of beneficiaries (expansion of the No Tax area and ISEE bands for which full or partial exemptions are provided). ¹⁴ Over the same period, graduate satisfaction with both the timing of scholarship disbursement and the adequacy of the amount increased significantly (the increase over the decade is about 15 percentage points). Scholarships are less frequent among single-cycle second-level graduates (20.4%) due to their more favourable socio-economic background, while they are used by 27.0% of two-year master graduates and 26.7% of first-level graduates. The use of scholarships is also differentiated by field of study and is more common where students from less favoured socio-economic backgrounds is higher. In fact, this is particularly the case in both first-level and two-year masters' graduates in the foreign language, education, information and communication technologies and psychology. Compared to non-scholarship holders, graduates with scholarships attend lectures more regularly, have more successful university careers in terms of degree completion time and graduation mark and have taken greater advantage of study abroad and internship opportunities throughout their studies.

5. Degree completion time

Here the time spent obtaining a degree is analysed by taking into account several factors such as enrolment age, the duration prescribed by the course regulation and the degree completion time, as well as the age at graduation.

For the courses attended at the end of secondary school, there is a considerable regularity in enrolment, since in most cases enrolment takes place just after graduation. In fact, 84.4% of the first-level graduates enrolled at least one year later than the usual age, which is defined by AlmaLaurea as 19 years old. The single-cycle second-level graduates are even more regular (86.6%).

Some specific considerations regard two-year master graduates who have already completed a previous university course. For these, the number of students enrolling at the usual age, set by AlmaLaurea at 22, is not particularly high (63.6%), mainly due to delays accumulated during the first-level degree. In fact, 37.1% of the two-year masters completed the previous three-year course with at least one year's delay.

The average graduation age for 2022 graduates is 25.6, with obvious differences depending on the degree type: 24.4 years for first-level graduates, 27.0 for single-cycle second-level graduates and 27.2 years for two-year masters. As has also been noted in previous editions of the Report on the Graduates' Profile, the average age at graduation has fallen appreciably compared to the university system prior to the reform of Italian Ministerial Decree no. 509/1999 and has continued to decrease over time: in 2012 it was 26.7 years and fell below 26 years in 2018. The decline in the average age at graduation over the past ten years is most pronounced among first-level graduates (-1.2 years).

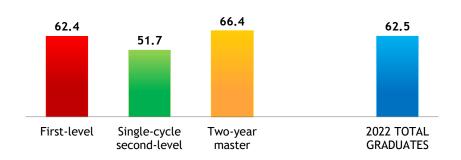
The average age at graduation among 2022 first-level graduates fluctuated between 23.7 years in engineering and engineering trades and 27.1 years in law (for these graduates the high age at graduation is due in particular to the fact that almost 40% enrol two or more years later than the standard age of 19). The average age at graduation of single-cycle second-level varies relatively little despite the different duration of the courses (5 or 6 years), and ranges from 26.7 years in law to 28.0

¹⁴ Italian Law no. 232 of 11 December 2016, "State Budget Plan for the 2017 Financial Year and Multi-Year Budget for 2017-2019", Article 1, paragraph 252-267 and subsequently Italian Decree-Law no. 34 of 19 May 2020 (Article 236, implemented by Italian Ministerial Decree no. 234 of 26 June 2020.

in education. As noted, the average age of two-year master's graduates is 27.2 years: engineering and engineering trades and economics (26.3 years), health (29.6 years) and education (28.9 years). However, this is an age in gross terms, which is also conditioned by the considerable numbers of graduates who entered the two-year master course at a higher age than usual.

The degree completion time of studies, where the ability to complete the course of study within the timeframe set by regulations is measured, has recently recorded a steady and marked improvement even though in the last three years the extension of the closure of the academic year granted to students due to the Covid-19 emergency boosted the effect. While in 2012 40.7% of graduates completed their studies on time, in 2022 the percentage reached 62.5% (Figure 7). By contrast, while ten years ago 13.6% of graduates completed their course of study four or more years after their course of study schedule, today this proportion is more than halved (5.7%).

Figure 7 - 2022 graduates: completion of the course of study within the prescribed degree completion time by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

The degree completion time appears consolidated and continues to apply to a high portion of first-level graduates (62.4%). As many as 73.0% of the graduates in psychology complete their course of study within the three years prescribed by regulations. At the other extreme, 42.9% of the graduates in architecture and construction manage to graduate on time.

As for single-cycle second-level graduates, 51.7% of them obtained their degree within the time prescribed for graduation. Here too, diversified situations results in each field of study: both graduates in education (such course was established over the last few years) and health and pharmacy are regular (78.0% and 52.4% respectively). On the other hand, only 24.3% of graduates in architecture and construction and 40.3% in veterinary are regular.

Compared to first-level graduates, there is even greater degree completion time for two-year masters, where 66.4% of graduates complete their studies with peaks of over 75% for graduates in sports sciences and physical education (83.0%), health (79.5%), economics (75.9%) and agriculture-forestry (70.7%). On the other hand, graduates from architecture and construction, humanities and

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¹⁵ Recall that due to the Covid-19 pandemic Italian Decree Law no. 18 of 17 March 2020, Art. 101, paragraph 1, had extended the end of the academic year to 15 June. For 2021 graduates the date considered for the conclusion of the academic year was therefore 15 June 2021 and not 30 April (as for the 2020 graduates). Again in 2022 the amendment to the decree law of 24 December 2021 confirmed the extension of the academic year to 15 June 2022.

literature, engineering and engineering trades and arts and design are less regular (with percentages of 39.5%, 54.6%, 57.1% and 58.2% respectively).

5.1. Focus on the Degree completion time insight: results of a linear regression model

A linear regression model was applied to analyse the many factors that affect degree completion time. The dependent variable is the delay index, which is the ratio between graduation delay and prescribed duration of the course of study. This index allows the delay to be measure regardless of its duration. It is equal to zero for those who are completely on time and it increases in proportion to the accumulated delay and is negative for those whose degree completion time is shorter than the usual duration. First-level graduates have a delay index of 0.35, which means that on average they take 35% longer to complete their degree than the prescribed duration of the course. Single-cycle second-level graduates take 28% longer (delay index of 0.28), while two-year master graduates take 37% longer than the prescribed two-year period (0.37).

The analysis took into account the following factors: high school/secondary school diploma mark, field of study, geographic mobility for study purposes, lectures attendance, proportion of lectures taken remotely, receipt of a scholarship and work while studying.¹⁶

One of the most important factors in determining the accumulated delay is the field of study (Table 1): compared to graduates in sports sciences and physical education, those graduated in architecture and construction take 35.8% longer than the prescribed duration of the course of study. As an example, a three-year graduate in sports sciences and physical education takes three years to obtain their degree while a three-year graduate in architecture and construction takes more than 4 years. High school/secondary school diploma mark still represents an important indicator of the how long students take for completing their studies. As a result, those who obtained their diploma with 60 out of 100 take 22.4% longer to obtain a degree compared to those who scored top marks at high school/secondary school. Also influencing the speed of concluding one's studies is the approach taken to lectures, including attendance and the proportion of lectures taken remotely. Specifically, compared to a graduate who attends lecturers regularly (more than 75% of the courses of study), those who attend less than 75% of lectures accumulate 11.3% more delay than the usual duration. Similar effects can be observed for studying workers, for whom the accumulated delay is 34.8% more than for those who never worked during their studies. There are also relevant differences with regard to the territorial area and geographic mobility for study purposes. In general, graduates who got their high school diploma in the North (regardless of the location of their university) are quicker to complete their university studies. Those who graduate from a university in the Centre, having earned their high school/secondary school diploma in the same area, take 9.2% longer than those who finished high school/secondary school in the North and stayed on to study at a university in the same region. Those who graduate from a university in the South, having also finished high school/secondary school in the

¹⁶ The model also considered gender, but it was not significant. Citizenship, parents' educational qualification, social status, type of high school/secondary school diploma, average provincial score of the 2022 Invalsi tests, delayed enrolment in the course of study, degree type, previous university experience, cultural and professional motivations in enrolling at university, size of the university, distance between housing and place of study, renting housing during studies, doing internships recognised by the course were excluded from the model because of their poor informative contribution. A model with the same definition of covariates was applied to a logarithmic transformation of the delay index, confirming the results here presented.

South, take 16.3% longer. As mentioned before, cultural and socio-economic background were not included in the model because of their modest contribution: probably the effect of these factors is partly assimilated by school performance (high school/secondary school mark) and partly by the choice of field of study.

Table 1 - 2022 graduates: linear regression model for the assessment of the delay index

	b	S.E.
High school/secondary school diploma mark (average, out of 100)	-0,006	0,000
Field of study (Sports sciences and physical education=0)		
Agriculture, forestry and veterinary	0,183	0,009
Architecture and construction	0,358	0,009
Arts and design	0,212	0,009
Economics	0,117	0,007
Education	-0,025	0,008
Engeneering and engeneering trades	0,300	0,008
Foreign languages	0,244	0,008
Health and pharmacy	0,025	0,007
Humanities and literature	0,264	0,008
Information and communication technologies (ICTs)	0,304	0,010
Law **	0,011	0,008
Natural sciences, mathematics, physics and statistics	0,222	0,008
Politics, social sciences and communications	0,134	0,008
Psychology	0,092	0,008
Geographic mobility for study (secondary school diploma in the North and degree in the	e North=0)	
secondary school diploma abroad and degree in Italy	0,161	0,025
secondary school diploma in the South and degree in the Centre	0,143	0,005
secondary school diploma in the South and degree in the North	0,094	0,004
secondary school diploma in the South and degree in the South	0,163	0,003
secondary school diploma in the Centre and degree in the South	0,157	0,015
secondary school diploma in the Centre and degree in the North **	0,004	0,007
secondary school diploma in the Centre and degree in the Centre	0,092	0,003
secondary school diploma in the North and degree in another geographic area *	-0,019	0,009
Attended lectures on a regular basis (more than 75% of prescribed classes=0)		
less than 75%	0,113	0,002
Remote learning lectures (more than 50%=0)		
25% to 50%	0,049	0,002
less than 25%	0,533	0,003
Took advantage of scholarships (yes=0)		
no	0,080	0,002
Work during studies (no work experience=0)		
studying workers	0,348	0,004
working students	0,075	0,002
Constant	-0,053	0,008

Note: R-squared = 0.226 (adjusted R-squared = 0.226), N = 250,174

Where not explicitly stated, parameters are significant at 1% (p<0.01).

Source: AlmaLaurea, Graduates' Profile Survey.

6. Graduation marks

The average graduation marks recorded among graduates in 2022 were 104.0 out of 110, a value that has been trending upwards in recent years (it was 102.7 out of 110 in 2012). This growth, slight and constant since 2015, was particularly marked last year (+0.5 points compared to 2021). In general, the largest increase over the past ten years was seen among single-cycle second-level graduated (+1.8)

^{*} Significance at 5% (p<0.05), ** Not significant

points compared to 2012). In this respect, among 2022 graduates there were appreciable differences by degree type: 101.1 for three-year graduates, 106.0 for single-cycle second-level and 108.1 for two-year masters (Figure 8).

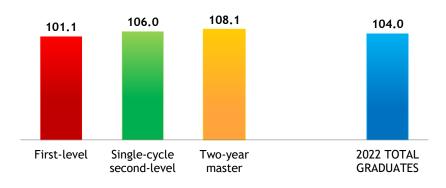
As noted, while the average mark for first-level courses is 101.1, there is a certain heterogeneity among field of studies, with final marks ranging from 97.8 for economics to 98.0 for

engineering and engineering trades to 105.1 for health to 105.3 for humanities and literature.

The average graduation mark for single-cycle second-level course of study, 106.0 out of 110, shows a smaller range of variation, from 103.1 among graduates in law to 107.6 among graduates in architecture and construction and those in health and pharmacy.

The two-year masters show a very high average graduation mark (108.1), also due to an incremental effect compared to the performance obtained at the end of the first-level course of study: the average increase in graduation mark obtained at the end of the second-level course of study is more than 7 points compared to the degree obtained in the first level. The two-year master fields of study having relatively lower average final marks are industrial and information engineering and economics (106.6 and 106.7 respectively).

Figure 8 - 2022 graduates: graduation mark by degree type (average, out of 110)



Note: when calculating averages, the mark of 110 cum laude was converted to 113. Source: AlmaLaurea, Graduates' Profile Survey.

6.1. Focus on the graduation marks insight: results of a linear regression model

To analyse the determinants of graduation mark, a linear regression model¹⁷ was applied (Table 2). The analysis took into account the following factors: high school/secondary school diploma type, high school/secondary school diploma marks, provincial average score on the Invalsi 2022 Italian tests, degree type, field of study, geographic mobility for study purposes, cultural reasons for enrolling in the university, lectures attendance, proportion of lectures taken remotely and work during studies. The model confirms the presence of a significant difference by degree type: all other things being equal, compared to a first-level degree it is estimated that a single-cycle second-level will achieved final marks almost 3 points higher (out of 110) while a two-year master more than 7 points higher. A

¹⁷ Factors related to gender, social status and delayed enrolment were taken into account in the model but were not significant. The following factors were excluded from the model in view of their poor contribution: parents' qualification, citizenship, size of the university, previous university experience, professional motivation in enrolling at university, distance between housing and the place of study, renting housing during studies, receiving a scholarship and doing internships recognised by the course of study.

strong heterogeneity in terms of fields of study is also confirmed. Indeed, considering the two opposite ends, a degree in health and pharmacy results in a boost in terms of degree marks of 6.9 points compared to a graduate in engineering and engineering trades. High school/secondary school diploma mark has a strong impact in setting university performance in terms of graduation mark. Indeed, who achieve 100 out of 100 obtain a graduation mark 10 points higher than a high school/secondary school graduate who has obtained the minimum diploma mark. This, of course, all other conditions being equal, including the average provincial score on the Invalsi test in Italian and the type of high school/secondary school diploma earned. In this respect, a graduate with a high school diploma obtains, ceteris paribus, more points while a graduate with a technical secondary school diploma obtains (3.9 points and 1.9 points respectively) than a graduate with a vocational diploma. Again, the way in which the university course of study are approached, including attending lectures remotely, has a certain impact: specifically, those who attend more than three-quarters of lectures have a graduation mark higher (almost 2 points) than a graduate who attends less than that percentage. In general, graduates from central and southern universities obtain higher graduation marks, regardless of where they went to high school/secondary school. For example, compared to graduates who migrated for study purposes from the South to the North of Italy, those who migrated from the South to the Centre scored almost 2 points higher and those who completed their high school/secondary school and university studies in the South scored 3.1 points higher. It is important to remember that these estimates were obtained by monitoring the average level of preparation of students through the average score (at a provincial level) of the most recent Invalsi tests in Italian and working while study. Finally, those who enrolled with strong cultural reasons ended their university experience with marks 1.5 points higher than those who considered this reasons less important. As in the model on degree completion time, the cultural background of origin was not included in the model because of its modest contribution: probably the effect of this factor is absorbed by school performance (high school/secondary school mark) and by the field of study.

The variability of the graduation mark whether among different courses of study or different universities considering the same field of study, is also the result of a number of casual institutional factors: standards for awarding marks in exams, criteria for awarding the final mark and any extra points, standards for assessing and the complexity of the final papers, etc. A more in-depth study carried out on 2020 graduates¹⁸ underscored how, considering the same factors on entering university (gender, family of origin, type of high school/secondary school diploma, geographic area of origin, etc.), first-level graduates in humanities and literature obtained an average exam grade 2.6 points (out of 30) higher than graduates in engineering and engineering trades. Such variability, measured all other things being equal, raises reasonable questions about the ability of the graduation mark to accurately measure the level of graduates' skills.

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¹⁸ AlmaLaurea (2021), 23rd Graduates' Profile Survey 2020. 2021 Report, <u>www.almalaurea.it/sites/default/files/2022-05/almalaurea_profilo_rapporto2021_0.pdf</u> (in Italian).

Table 2 - 2022 graduates: linear regression model for the assessment of final graduation marks

	b	S.E.
Diploma (vocational=0)		
high school	3,927	0,076
technical	1,892	0,080
High school/secondary school diploma mark (average, out of 100)	0,250	0,001
Average provincial score on the Invalsi test in Italian		0,003
Degree type (First-level=0)		
Single-cycle second-level	2,856	0,053
Two-year master	7,187	0,029
Field of study (Engeneering and engeneering trades=0)		
Agriculture, forestry and veterinary	5,061	0,085
Architecture and construction	4,049	0,079
Arts and design	6,367	0,077
Economics	1,819	0,050
Education	6,004	0,068
Foreign languages	3,707	0,060
Health and pharmacy	6,865	0,053
Humanities and literature	5,734	0,065
Information and communication technologies (ICTs)	2,993	0,100
Law	3,538	0,081
Natural sciences, mathematics, physics and statistics	3,484	0,052
Politics, social sciences and communications	4,261	0,056
Psychology	4,116	0,068
Sports sciences and physical education	5,234	0,091
Geographic mobility for study (secondary school diploma in the South and degree in the North-	=0)	
secondary school diploma abroad and degree in Italy	-1,668	0,311
secondary school diploma in the South and degree in the Centre	1,788	0,075
secondary school diploma in the South and degree in the South	3,068	0,055
secondary school diploma in the Centre and degree in the South	2,991	0,182
secondary school diploma in the Centre and degree in the North	1,810	0,098
secondary school diploma in the Centre and degree in the Centre	3,039	0,062
secondary school diploma in the North and degree in another geographic area	2,837	0,123
secondary school diploma in the North and degree in the North	0,743	0,075
Relevance of cultural reasons for the choice of degree programme (not definitely yes=0)		
definitely yes	1,483	0,030
Attended lectures on a regular basis (less than 75% of prescribed classes=0)		
more than 75%	1,923	0,029
Remote learning lectures (less than 25%=0)		
25% to 50%	2,436	0,037
more than 50%	2,649	0,035
Work during studies (studying workers=0)		
working students	0,995	0,050
no work experience	1,559	0,052
Constant	79,069	0,121
	-	

Note: R-squared = 0.427 (adjusted R-squared = 0.427), N = 250,931

Source: AlmaLaurea, Graduates' Profile Survey.

7. Opinions about university experience

The opinions expressed by the new graduates involved in AlmaLaurea surveys reveal a general satisfaction with the various aspects of their study experience, regardless of the degree type completed. The pandemic, which affected much of the completed university experience, seems not to have influenced graduates' evaluations (which are confirmed to be increasing or stable on all aspects of the university experience) as much as, as might have been expected, the use of certain university facilities and services. Specifically, the share of those who used computer workstations (the

contraction is over 10 percentage points compared to 2020 and 17 points compared to 2012), equipment for learning such as labs and practical work (over 7 and 9 points, respectively), library services (about 9 and 15 points) and individual study spaces (over 8 and 2 points) decreased considerably. In this regard, it is interesting to note that the decline in the use of most university facilities had already begun before the advent of the pandemic, which inevitably intensified its effects. The drop in use is most pronounced among two-year masters' graduates and first-level graduates, i.e. among those who, by virtue of their shorter duration, were most affected by the Covid-19 pandemic.

With regard to 2022, 88.8% of the graduates declare themselves satisfied with their relations with the lecturers (this is the sum of those who say they are definitely satisfied and quite satisfied, which in the rating scale used in the questionnaire corresponds to "definitely yes" and "more yes than no"). With regard to the classrooms attended by 96.3% of graduates, 83.9% considered them to be "always or almost always appropriate" or "often appropriate". Library services (e.g. loan/consultation and opening hours), used by 75.0% of graduates, receive a positive assessment (the rating scale used in the questionnaire considers the sum of "definitely positive" and "quite positive") from 92.9% of users. Computer workstations used by 61.4% of graduates were judged to be "available in an appropriate number" by 62.5% of users. Individual study areas were used by 71.6% of students and 67.2% considered them "appropriate". With regard to the evaluation of the equipment for teaching propose, such as workshop and practical activities, among those who used them (72.4%) there was an overall satisfaction of 79.1% (sum of those who rated it as "always or almost always appropriate" and "often appropriate").

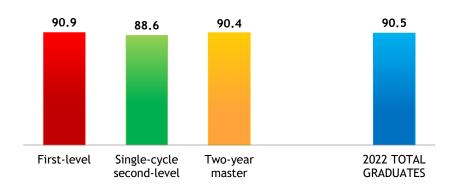
Among the other services offered by the university, 2022 graduates say they made extensive use of the student administrative offices (92.7%), distantly followed by post-graduate study orientation services (60.0%), job orientation training initiatives (56.2%), the job placement service (55.5%) and finally job search support services (53.3%). The users of these services were only moderately satisfied with these services compared to others assessed (the rating scale used in the questionnaire considers the sum of "definitely yes" and "more yes than no"): 66.7% for the job placement service, 66.3% for post-graduate study orientation, 64.2% for the student administrative offices, 62.3% for job orientation training initiatives and finally 58.9% for job search support.

Exam administration (including exam session, timetables, information, bookings) was rated as appropriate ("always or almost always" or "for more than half of the exams") by 85.7% of the graduates. Furthermore, 83.6% of the graduates felt that the overall study load was appropriate with respect to the duration of the course of study (according to the rating scale used in the questionnaire this corresponds to the sum of "definitely yes" and "more yes than no").

The analysis of the trend in ratings over time shows an upward tendency for all aspects examined. Ratings for facilities and equipment are also tended to increase despite their lower use.

A summary of the various aspects of the university experience can be seen in the overall satisfaction with the course of study, in respect of which 90.5% of the graduates say they are satisfied overall (Figure 9). This percentage has tended to increase in recent years. In 2012 it was 86.7%.

Figure 9 - 2022 graduates: overall satisfaction of the course of study by degree type (percentage values)



Note: the percentage of satisfaction includes both rates: "definitely yes" and "more yes than no". Source: AlmaLaurea, Graduates' Profile Survey.

Breaking it down by degree type, satisfaction with the university experience is high and consolidated over time among first-level graduates: 90.9% say they are satisfied overall with the course of study they completed. The most satisfied are first-level graduates from education (95.4%), psychology (94.1%), law (93.3%) as well as natural sciences, mathematics, physics and statistics (92.5%). Despite the gap is generally small, graduates in foreign languages (86.1%), sports sciences and physical education (88.4%) tend to be more critical.

Among single-cycle second-level graduates, 88.6% said they were generally satisfied with their university experiences. The most satisfied were graduates from the education (93.4%) and from law (90.9%). Conversely, those who were less satisfied came from health and pharmacology (85.5%), architecture and construction (88.6%) and from veterinary (89.0%).

The overall satisfaction level of two-year masters' graduates with their most recent university experience is 90.4%. The most satisfied are the graduates of the humanities and literature (92.6%), engineering and engineering trades (91.8%), economics (91.7%) and education (91.6%). The most critical are the graduates of the sports sciences and physical education (82.8%) and those of health (83.2%).

The perceived value of the experience nearing its end is also provided by answering the question "If you could go back in time, would you enrol again at any university?". A fully positive answer, given by those who would confirm the choice made both in terms of course of study and university, is recorded for 72.6% of the entire population (Figure 10), a percentage that is higher than that of 2012 (68.0%). 8.8% of graduates would confirm the university, but would move on to another course of study, 10.7% would follow the same course of study but changing to a different university, 5.3% would change both course of study and location. Finally, only 2.2% would no longer enrol at the university (as for the two-year masters, reference is made only to the final two years).

71.5 69.8 75.4 72.6

First-level Single-cycle Two-year 2022 TOTAL

master

Figure 10 - 2022 graduates: chance to enrol again at university by degree type (percentage values)

second-level

Source: AlmaLaurea, Graduates' Profile Survey.

Among first-level graduates, 71.5% would fully confirm the choice they made at the time of enrolment (same course of study same university). Another 10.2% would remain at the same university, but would opt for a different course of study; 10.5% would do vice versa, that is, the same course of study but at a different university. 5.6% would change both course of study and location and only 1.7% would no longer enrol at the university. First-level graduates in psychology (77.8%) and education (77.5%) were most likely to enrol again in the same course of study. On the other hand, the percentage of those who would fully confirm their experience is lower among graduates in foreign language group's graduates (56.9%), who would often change their course of study, university or both of them.

If they could go back, 69.8% of the single-cycle second-level graduates would repeat the choice of the course of study and the university (compared to 82.6% of the graduates in education and 64.0% in architecture and construction). 17.5% would follow the same course of study but in a different university. The difference compared to first-level graduates is partly attributed to the fact that some single-cycle second level courses of study are subject to a successful completion of an admission test and it is often required to enrol where one is admitted.

The most positive opinions expressed on various aspects by two-year masters are echoed in the high tendency to confirm the choice of course of study and the university where they graduated (two-year masters obviously refers only to the two-year course of study) according to 75.4% of graduates. Here also there are different situations among the fields of study: from 80.9% of the graduates in humanities and literature to 70.0% of foreign languages.

8. Post-graduate study prospects

Among 2022 graduates, pursuing education after graduation is the intention of 68.1% of graduates (Figure 11). This share has tended to grow over time (it was 63.0% in 2012) despite the contraction observed in the last year (it was 68.6% in 2021). Specifically, attention should be drawn to the relevant growth among first-level and single-cycle second-level graduates: compared to 2012 there was an increase of almost 7 points among the former and 6 points among the latter. The contraction recorded over the past year is more pronounced with regard to the continuation of first-level graduates with a

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two-year master's degree. This trend started as early as 2021 and is consistent with what was recorded one year after graduation in terms of actual enrolment.¹⁹

As might be expected, the trend to continue one's studies is particularly marked among first-level graduates (82.8%), who intend to move largely towards a two-year master's degree (64.9%), and among single-cycle second-level graduates (72.0%), for whom specialisation schools (33.9%), academic masters (11.5%) and internships/legal internships (10.2%) are the most frequently prospect. Although the two-year graduates are relatively less likely to continue their studies (42.1%), some of them intend to continue with a PhD: 14.0%.

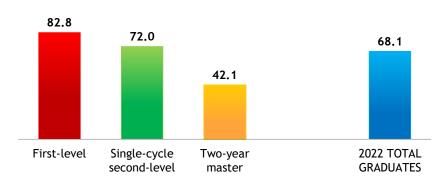


Figure 11 - 2022 graduates: intention of continuing studies by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Among first-level graduates, the intention to continue their studies is particularly widespread among graduates in psychology (95.5%), humanities and literature (91.7%), natural sciences, mathematics, physics and statistics (90.5%), sports sciences and physical education (90.4%), engineering and engineering trades (90.1%). On the other hand, graduates in information and communication technologies (62.8%), law (68.0%) and education (71.1%) are less convinced that they want to continue their education. Not all first-level graduates who intend to continue their studies are considering a two-year master's degree, although this choice is confirmed as the most widespread objective, being indicated by 64.9% of graduates: it is particularly wished for by graduates in psychology (90.0%), engineering and engineering trades (86.2%), natural sciences, mathematics, physics and statistics (83.6%) as well as humanities and literature (83.4%). In detail, 71.9% of first-level graduates who intend to enrol in a two-year master's degree do so to complete and enrich their education. This percentage varies from 94.0% in health (where the number of those who intend to continue their education with a two-year master's degree is definitely low) to 55.5% in psychology, where the number of those who intend to enrol in a two-year master's degree is very high, considering it an almost compulsory choice in order to enter the labour market. 62.9% of first-level graduates intending to enrol in a two-year master's degree declare that they intend to continue their studies at the same university (from 74.2% in architecture and construction to 50.8% in politics, social sciences and communications).

72.0% of single-cycle second-level graduates plan to continue their studies. This willingness varies considerably by field of study: it is high among graduates of veterinary (81.9%, with 37.9% oriented

¹⁹ AlmaLaurea (2023), 25th Survey on the Occupational Condition of Graduates. Summary of the 2023 Report, https://www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-employment-status.

towards a post-graduate specialisation) and from health and pharmacy (82.5%, with 62.1% oriented towards a post-graduate specialisation), while it is average among graduates in law (72.1%, with 30.4% intending to engage in practical training). On the other hand, the intention to continue studies is lower among graduates in architecture and construction (44.7%, 14.3% oriented towards a master's degree and 9.9% towards a PhD), as well as education (49.8%, 14.8% oriented towards a specialist school and 7.9% towards a master's degree).

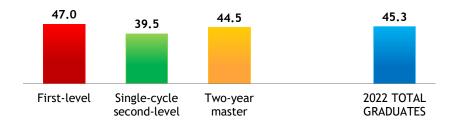
42.1% of two-year masters intend to continue their studies. Specifically, two-year masters in psychology (84.2%, with 29.9% planning an internship and 26.8% a post-graduate specialisation), health (57.3%, with 28.6% planning a master), natural sciences, mathematics, physics and statistics (56.8%, with 33.0% planning a PhD) and humanities and literature (56.2%, with 25.9% planning a PhD). Graduates from engineering and engineering trades (23.2%, 12.7% with a PhD), economics (27.2%, 10.3% with a master's degree) and information and communication technologies (28.1%, 19.9% with a PhD) are less likely to continue their studies.

9. Prospects for employment

With regard to prospects for employment, the consolidated South/North migration for studying and working that has persisted in our country for some time now has expanded to include movement towards foreign countries, an objective of interest for a good number of young graduates, not only for study but also as a possible work destination by virtue of the better working conditions generally offered in other countries.

45.3% of graduates' state they are willing to work abroad, a percentage that is essentially in line with the figure recorded in 2012 (when it was 45.4%). After annual increases that lasted until 2015 (when the percentage exceeded 50%), a contraction has been seen in recent years, especially the last three years. This reduction, which began before the pandemic, was certainly reinforced by the spread of teleworking and more generally the possibility of remote working from one's home country. Broken down by course of study, this share is 47.0% for first-level graduates, 39.5% for single-cycle second-level graduates and 44.5% for two-year masters' graduates (Figure 12).

Figure 12 - 2022 graduates: decidedly willing to work abroad by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

28.8% even say they are ready to move to another continent. At the same time, there is a widespread willingness to travel for business, even frequently (27.2%), as well as to relocate (43.5%), although these percentages have been declining over the last ten years. Only 4.6% of 2022 graduates

are not willing to travel. It remains to be understood to what extent the propensity to travel outside national borders is experienced by graduates as an opportunity for personal enrichment and to what extent it is felt to be a necessity for more satisfying professional prospects.

While permanent and full-time are the labour contracts most sought by graduates (83.0% and 81.3% are respectively decidedly willing to accept them), there is also a willingness to accept part-time jobs (36.1%) and fixed-term employment contracts (33.0%). In recent years there has been a strong increase in the willingness to engage in smart working or teleworking (40.5%), an option that is increasingly used by companies and that was highly appreciated by graduates during the pandemic (almost 30 percentage points higher than in 2012, the result of a substantial increase of almost 20 percentage points observed since 2020).

The change in expectations with regard to the working world is particularly evident from an analysis of the evolution attributed by graduates to the various aspects they seek in work. Among the aspects considered most relevant, for some time now what matters most is the acquisition of professional skills, specified by 78.1% of graduates. Also very relevance (percentages above 60%) are job security (71.7%), career prospects (70.4%), earning prospects (68.3%) and independence or autonomy at work (63.1%). Note however that since 2016, the year from which all the aspects currently assessed by the questionnaire are surveyed, increases of more than 15 percentage points have been observed for the pursuit of free time (reaching 46.5% in 2022), of about 11 points for flexibility in working hours (40.5% in 2022) and for the possibility of earning prospects (68.3% in 2022) and of more than 10 points for the pursuit of independence or autonomy (63.1% in 2022). These trends, together with the new methods of working that have emerged as a result of the pandemic, show the urgency of a new approach to work that, thanks to the development of technology, enables an improvement in lifestyles and work-life balance.

When asked "are you willing to accept jobs that have no connection with your degree?", there was a broad willingness on the part of graduates: among 2022 graduates, 25.2% would accept unconditionally, 55.6% only as a temporary solution, while only 17.9% would reject an unrelated job. Compared to 2016, the first year for which data are available, there was a 7% decrease in the those who would unconditionally accept a job that is not related to their studies.

In 2022, 76.4% say they would not accept a monthly net income lower than €1,250 for full-time employment, a share that has increased substantially over the past six years (it was 48.9% in 2016). This shows that graduates increasingly understand the importance of having their investment in education recognised, including from a financial point of view.

The complete documentation is available at:
www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-profile.
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