

# 26th Report 2023 Graduates' Profile

# **2024 Summary Report**

Supported by



# Summary of the 26<sup>th</sup> Survey on the 2023 Graduates' Profile (2024 AlmaLaurea Report)

The Graduates' Profile takes into account 295,104 graduates in the calendar year 2023<sup>1</sup> from 78 of the 82 universities participating in AlmaLaurea as of June 2024.<sup>2</sup> These universities are distributed throughout the country with a certain homogeneity: 28 in the North, 24 in the Centre, 26 in the South. In 2023 six universities (Sapienza University of Rome, Bologna, Padua, Turin, Naples Federico II and University of Milan) had more than 10,000 graduates. The population of graduates breaks down as follows: 162,615 first-level graduates (representing 55.1% of all graduates in 2023), 30,835 single-cycle second-level graduates (10.4%), 101,654 two-year masters (34.4%).<sup>3</sup> 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 274,605 graduates, representing 93.1% 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 (15.6%), health (12.4%), engineering and engineering trades (11.7%), politics, social sciences and communications (10.4%) and natural sciences, mathematics, physics and statistics (10.3%). The single-cycle second-level courses of study (lasting at least five years) are concentrated in a few fields: health and pharmacy (46.3%), law (30.0%), education (15.2%, with only the degree class in Primary Schooling Sciences), architecture and construction (6.1%), veterinary (2.1%), humanities and literature (in 2023, only 93 graduates - that is 0.3% - 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 courses are open to graduates who have already obtained at least one first-level degree. The two-year masters are found into 15 fields of study, most from four of them: economics (16.4%), engineering and engineering trades (15.9%), natural sciences, mathematics, physics and statistics (14.6%) and politics, social sciences and communications (10.4%). In the joint analysis by field of study and degree type, single-cycle second-level graduates in humanities and literature are not taken into consideration due to their small number.

<sup>&</sup>lt;sup>1</sup> 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 at <a href="https://www.almalaurea.it/en/our-data/almalaurea-surveys">www.almalaurea.it/en/our-data/almalaurea-surveys</a>.

<sup>&</sup>lt;sup>2</sup> On an annual basis, the graduates involved in the survey make up approximately 90% of all graduates of Italian non-online universities.

<sup>&</sup>lt;sup>3</sup> 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 646). Documentation is available at <a href="www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-profile">www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-profile</a>.

# 1. Gender and social background

### 1.1. Gender

Accounting for more than half of all graduates in Italy since the early 1990s, women represent 60.0% of all graduates in 2023. Such a share has tended to be stable over the last ten years. Women account for 68.6% of single-cycle second-level course of study, an appreciably higher proportion than what was observed among two-year masters (57.7%) and first-level graduates (59.7%). 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% (49.5%).

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 ones, in particular those of the STEM area (science, technology, engineering, mathematics). In fact, in the first-level courses, women constitute a marked majority in education (94.4%), foreign languages (85.3%), psychology (81.1%), health (76.0%) and arts and design (71.2%). Conversely, they represent a minority in information and communication technologies (ICTs) (14.0%), engineering and engineering trades (27.2%) and sports sciences and physical education (32.8%). 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 (86.2%), psychology (82.5%) and arts and design (73.0%), while there are very few in information and communication technologies (ICTs) (22.0%), sports sciences and physical education (25.6%) and engineering and engineering trades (27.9%). In single-cycle second-level degree women prevail in all fields of study: from 95.3% in education to 59.7% in architecture and construction.

# 1.2. Social background

For years AlmaLaurea has been pointing out that the population of graduates comes from socioculturally favoured family backgrounds compared to the Italian population as a whole, confirming the persistence of strong gaps in access to third-level education. This is supported by the fact that 14.6% 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 17.9% and 22.6%). 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

<sup>4</sup> On the topic of gender differences, in January 2022 AlmaLaurea published the report "Laureate e laureati: scelte, esperienze e realizzazioni professionali", <a href="www.almalaurea.it/i-dati/le-nostre-indagini/indagini-tematiche/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</a> (in Italian).

Even though the composition of AlmaLaurea's graduates in 2012 was different from the current one, 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 presented in the Report.

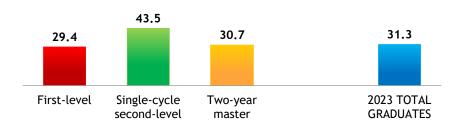
6 AlmaLaurea (2023), 8th Survey of PhD Profiles 2022. 2023 Report, www.almalaurea.it/en/our-data/almalaurea-surveys/phds-profile.

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> Elaborations based on 2023 Eurostat data 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.

AlmaLaurea, it was found that 31.3% have at least one parent with a university degree (27.6% in 2013). This share is 29.4% among first-level graduates, rises to 30.7% among two-year master graduates and 43.5% among single-cycle second-level graduates (Figure 1). Among first-level graduates and two-year master graduates in 2023 this percentage was particularly high in engineering and engineering trades (38.8% and 36.9% respectively), while among single-cycle second-level graduates it was even more pronounced, at 51.8%, in health and pharmacy.

Figure 1 - 2023 graduates: at least one parent with a university degree 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 the latter, 20.3% of them complete their studies in the same field of study as one of their parents. However, this share rises to 37.8% among single-cycle second-level graduates, it is within the degrees that most frequently lead to the self-employment (42.3% among graduates in health and pharmacy and 39.9% in law).

Graduates with a high social background (i.e. those whose parents are entrepreneurs, self-employed and managers) accounted for 22.4% in 2023 (21.0% among first-level graduates, 21.8% among two-year masters and 32.3% among single-cycle second-level graduates). Conversely, graduates with a less-favoured social background, whose parents perform blue collar occupations, are 22.8% (24.6% first-level graduates, 21.8% among two-year masters, only 16.5% among single-cycle second-level graduates).

Although schematic, these data highlight the weight of social background on the choices and possibilities of successfully completing a course of study at university. Enrolment in single-cycle second-level courses inevitably requires 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 represent a population with a relatively high social background, particularly those in health and pharmacy, those in veterinary and those in law. Moreover, the social background of two-year masters tends to be 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. Geographical origin and educational background

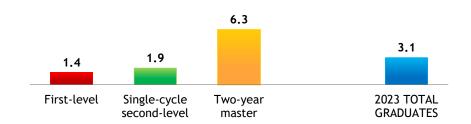
# 2.1. Geographical origin

In 2023 42.8% 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 68.3% of the graduates studied at most in the province neighbouring the one where they got their high school/secondary-school diploma. This phenomenon, which involves 74.2% of first-level graduates and 70.8% of single-cycle second-level graduates, is less pronounced among two-year masters (58.0%). At field of study level, the proportion of graduates who have moved to a neighbouring province is highest among graduates in education (78.3%) and economics (73.2%), while it is lowest for psychology (58.9%), politics, social sciences and communications (61.0%) and arts and design (61.3%). 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 keep education costs down. According to the data, at most 72.7% of those from less favoured backgrounds studied in the neighbouring province compared to 65.6% 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 25.3% to 31.7%) 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. 28.5% of graduates who obtained their degree in the South chose a university in a different geographical area (a percentage that is constantly increasing, it was 23.2% in 2013), compared to 14.5% of those who obtained their degree in the Centre and 4.0% 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 33.5% of those coming from more favoured contexts and 23.6% of those coming from less favoured contexts.

In 2023, 13,876 citizens from other countries graduated from one of the universities in AlmaLaurea Consortium. Foreigners account for 4.7% of all graduates and are slightly increasing: they counted 3.2% in 2013. However, these are mostly young people belonging to immigrant families but living in Italy where 33.6% of graduates with non-Italian citizenship have obtained a high school/secondary school diploma in our country (31.7% in 2013). 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 2023 graduates is 3.1% and has slightly increased in recent years (it was 2.2% in 2013). The value rises to 6.3% among two-year masters and decreases to 1.4% among first-level graduates and 1.9% among single-cycle second-level graduates (Figure 2).

<sup>&</sup>lt;sup>9</sup> As a matter of fact, almost all Italian provinces host one or more course of study.

Figure 2 - 2023 graduates: foreign citizens with high school/secondary school diploma abroad by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

While almost half of all foreign citizens (42.5%), including those who obtained high school/secondary school diploma in Italy, come from Europe (in particular from Romania and Albania, 10.1% and 6.2% respectively), among foreign graduates who obtained their high school/secondary school diploma abroad the share of those coming from Europe fall (30.4%). 48.1% of the foreign graduates who obtained their high school/secondary school diploma abroad come from Asia and Oceania, and the most represented country, with 9.8%, is Iran, followed by China (8.5%) and India (7.6%). Foreign graduates with high school/secondary school diplomas abroad are more represented in specific fields of study such as architecture and construction (8.6%); information and communication technologies (ICTs) (5.8%); 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 2023, a prevalence of high school diplomas (73.5%) is found, in particular for scientific high school diplomas (awarded by 38.0% of graduates) and high school diplomas in classical studies (12.2%). This is followed by technical secondary school diplomas (19.8%) while vocational diplomas are marginal (3.1%).

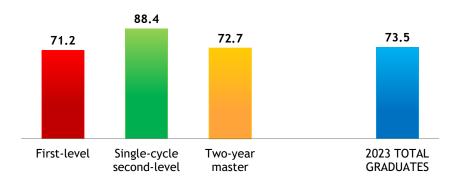
The share of graduates with a high school diploma has increased over the last ten years, rising from 72.6% in 2013 to 73.5% in 2023, particularly at the expense of graduates with a technical secondary school diploma, which fell from 22.3% to 19.8%. This is the result of a trend that saw graduates with a high school diploma increase until 2018 (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 diplomas. It will be interesting to monitor future trends given the recent activation of technical university degrees aimed in particular at students with a technical or vocational diploma with the aim of preparing professionals who are ready to enter the labour market. <sup>10</sup> 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.

-

<sup>&</sup>lt;sup>10</sup> The first-level graduates of 2023 include some graduates in vocational courses of study, which were launched in the 2018/2019 academic year. However, it is only a very small number (314 graduates).

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, 88.4% have in fact a high school education mainly in scientific (47.3%) or classical studies (24.6%), compared to 71.2% of first-level graduates (from high school in scientific and classical studies, 35.3% and 9.6% respectively) and 72.7% of two-year masters (from high school in scientific and classical studies, 39.4% and 12.8% respectively).

Figure 3 - 2023 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/secondary school diploma earned and the field of study chosen for university studies, which also shows a certain stability over time. If 71.2% of first-level graduates overall come from a high school diploma, such educational background relates to the majority of graduates in humanities and literature (89.3%) and psychology (87.3%). On the other hand, graduates with a high school diploma are less common among graduates in information and communication technologies (ICTs) (43.6%) and agriculture and forestry (48.1%), for whom technical or vocational diplomas are more common.

As previously mentioned, 88.4% of single-cycle second-level graduates came from high school; this percentage is over 90% among graduates in health and pharmacy (91.5%). Compared to the average for single-cycle second-level graduates (9.5%), the share of graduates with a technical or professional qualification is higher among graduates from architecture and construction (16.4%), education (13.9%) and law (12.5%). This percentage is negligible among graduates in health and pharmacy (5.1%).

Two-year masters have an educational background that is quite similar to that of first-level graduates, that is, a diploma mostly in high schools (72.7%) and technical secondary schools (18.3%) with similar differentiation by field of study. Another important aspect to take into consideration when analysing the educational background of graduates is the average high school/secondary school diploma mark, which among 2023 graduates is 83.1 out of 100 (in 2013 it was 82.0). The average high school/secondary school diploma mark for two-year masters' graduates is 83.0 out of 100, compared to 82.8 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 diploma marks earned by first-level graduates in 2023 were highest for graduates in engineering and engineering trades (87.6) and in natural sciences, mathematics, physics and statistics (85.8). In contrast, high school/secondary school diploma marks

were appreciably lower than the average among graduates in sports sciences and physical education (76.2), education (77.6) and law (79.3).

The high school/secondary school diploma marks are even higher among single-cycle second-level graduates, who on average earn 84.9 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 courses of study more than others. It is not surprising to note that the high school/secondary school diploma marks are particularly high among graduates in health and pharmacy (87.8).

# 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 gained during the course of study and recognised by the course of study involved a total of 9.8% of graduates in 2023<sup>11</sup> (Figure 4). In most cases (8.1%) study abroad experiences were in European Union programmes (Erasmus in first place), while the other experiences recognised by the course of study (Overseas, thesis abroad, etc.) were much less common (less than 2%).

The proportion of graduates with a study abroad experience recognised by the course of study, which had increased slightly until 2020 (when it stood at 11.3%), dropped significantly in 2021 and 2022 (when it fell to 8.5% and 8.3%, respectively), most likely due to the pandemic, during which study abroad experiences came to a standstill due to the severe travel restrictions. In the last year, however, there was an upturn in these experiences (+1.5 percentage points compared to 2022). This increase was seen in all degree types, but especially two-year masters, among whom the value came close to 2 percentage points.

Among the 2023 first-level graduates, the recognised study abroad experiences involve 7.3%, with a particularly marked peak in foreign languages (21.6%) and above-average values in politics, social sciences and communications (12.4%) and economics (11.4%).

Among the single-cycle second-level graduates, the study abroad experiences recognised by the course of study are relatively more widespread and affect 13.8% of graduates. These experiences are particularly frequent in architecture and construction (18.7%), law (15.0%), pharmacy (14.9%) and veterinary (14.2%).

Summary of the 26th Survey on the 2023 Graduates' Profile

<sup>&</sup>lt;sup>11</sup> For the sake of brevity, the entirely marginal share of graduates who had a study abroad experience on their own initiative (0.7% of 2023 graduates) was not reported.

FULL Graduates who ACADEMIC completed studies CAREER 18.6 abroad during the first-level, not for a two-year master 6.1 13.8 12.5 9.8 7.3 First-level Single-cycle Two-year **2023 TOTAL** second-level **GRADUATES** master

Figure 4 - 2023 graduates: study abroad recognised by the course of study by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Two-year masters who during their second level benefited from studying abroad as part of initiatives recognised by the course of study account for 12.5%. These were joined by graduates who participated in study abroad experiences during the first-level course of study, for a total of 18.6% over the "3+2" years. As was to be expected, study abroad during two-year master's studies were particularly strong for graduates in foreign languages (20.6%), but also among those from engineering and engineering trades (17.0%), economics (15.7%), architecture and construction (14.2%) and politics, social sciences and communications (14.0%).

Among graduates who have gained study experience abroad recognised by their course of study, 82.5% took at least one exam that was validated on their return to Italy. This percentage has increased of almost 10 percentage points in the last ten years. 24.3% of those who completed a period of study abroad have also prepared a considerable part of their thesis there (a share that rises to 41.3% among two-year masters). This share has started to grow again after the relevant decrease recorded during the pandemic, and this is the case across all degree types (reaching 33.6% in 2021 among two-year master's degrees).

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, 92.0% of graduates who had a recognised study abroad experience 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 63.6% among those who had not such an experience.

A specific analysis<sup>12</sup> 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 one year after graduation than those who never spent time abroad (+17.1%).

# 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

<sup>&</sup>lt;sup>12</sup> AlmaLaurea (2024), 26<sup>th</sup> Survey on the Occupational Condition of Graduates. Summary of the 2024 Report, www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-employment-status.

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 things being equal, 6.6% more likely to be employed one year after graduation than those who have not carried out this type of activity.<sup>13</sup>

In 2023, 60.7% of graduates had a curricular internship (Figure 5). In 2013 they involved 56.9% 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, probably due to the pandemic. From 2022 the share of graduates with this experience rose again (in 2023 it grew by almost 4 percentage points compared to 2021). Therefore, it seems that the slowdown in internship experiences has already been overcome. It should also be noted that the contraction of these experiences was probably also limited by the fact that most of the internships can be done via remote working. 37.9% of graduates had their curricular internship in a non-university setting, 12.3% in a university setting and 10.0% had a job that was then recognised by their course of study. The trend observed last year continued. In fact, after the increase in experiences within the university and concurrent decrease in those outside in 2020 and 2021, this trend reversed in the last two years 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: 94.3% of graduates expressed a positive opinion.

More specifically, the internship recognised by the course of study involved 59.4% of first-level graduates. In particular, 38.9% 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 (93.0%), health (90.9%), agriculture and forestry (82.2%). The minority of graduates in engineering and engineering trades (28.2%) and humanities and literature (30.8%) are instead involved in internships. Among first-level graduates, however, internships were more common (69.2%) among those who did not intend to pursue further studies with a two-year master's degree.

Curricular internships are also frequent among two-year master's degree graduates, reaching 63.6%. Moreover, 14.6% 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 78.2%. Graduates in sports sciences and physical education (91.3%), health (84.5%) and education (77.5%) are more committed to these activities, while those from the humanities and literature (41.8%) are less so.

With reference to single-cycle second-level courses of study, curricular internships involved 58.0% of graduates, although the situations differ widely according to the field of study. As many as 85.3% of graduates in education engaged in these activities compared to 25.4% of those in law.

Summary of the 26th Survey on the 2023 Graduates' Profile

<sup>&</sup>lt;sup>13</sup> AlmaLaurea (2024), 26<sup>th</sup> Survey on the Occupational Condition of Graduates. Summary of the 2024 Report, 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 year master 78.2 14.6 63.6 60.7 59.4 58.0 **2023 TOTAL** First-level Two-year Single-cycle

master

second-level

Figure 5 - 2023 graduates: internships recognised by the course of study by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

# 3.3. Work while studying

Over the past ten years there has been a slight decline in the share of graduates with work experience during their studies (from 69.0% in 2013 to 66.2% in 2023). 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. However, in the last year there was an appreciable recovery of 2.1 percentage points. 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, linked to the gradual decline in the proportion of the adult population enrolled in university studies, to the more recent emergency caused first by the Covid-19 pandemic and then by the uncertain geopolitical landscape. More specifically, in 2023, 7.9% of university graduates were studying workers, i.e. they graduated while working steadily during their studies. <sup>14</sup> This share returned to levels similar to those of 2013 and it has been slowly but steadily recovering over the past five years. Working students, i.e. all the other graduates who have had working experience during their university studies, accounted for 58.3%. In contrast, the proportion of graduates without any type of work experience reached 33.5% in 2023.

66.1% of first-level graduates performed some kind of work while studying. 6.4% were studying workers. Graduates who have had work experience are more frequent in sports sciences and physical education (81.6%), education (79.6%), law (77.6%), agriculture and forestry (75.9%) and politics, social sciences and communications (75.0%). 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 (ICTs) and natural sciences, mathematics, physics and statistics (55.7%, 56.2%, 58.7% and 59.4% respectively). Except for information and communication technologies (ICTs), these last groups show a very low percentage of studying workers (oscillating between 2.2% and

<sup>14</sup> Studying workers 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.

Summary of the 26th Survey on the 2023 Graduates' Profile

**GRADUATES** 

3.7%), which are more predominant in law (30.7%), education (15.5%), politics, social sciences and communications (9.9%) and sports sciences and physical education (8.9%).

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 (57.6%) are involved in working activities, ranging from 79.2% of graduates in education to 45.3% of graduates in health and pharmacy. It is true however that only 4.7% of single-cycle second-level graduates were for all intents and purposes studying workers.

Among two-year masters, 69.0% were engaged in work experiences during their master's studies, a share ranging from 88.7% in sports sciences and physical education to 55.5% in engineering and engineering trades. The share of studying workers stands at 11.3%, although it reaches decidedly substantive levels among graduates in health (43.7%) and education (33.3%). In contrast, it is minimal among graduates in engineering and engineering trades (4.6%).

# 4. Study conditions

#### 4.1. Class attendance

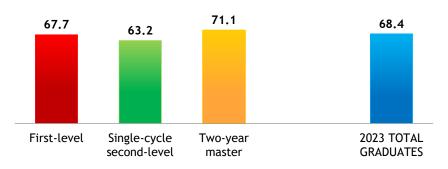
68.4% of 2023 graduates regularly attended classes for at least three quarters of the planned lessons: 67.7% for first-level graduates, 63.2% for single-cycle second-level graduates and 71.1% for two-year master graduates (Figure 6). Note that this count includes lessons attended remotely, particularly those held during the pandemic. After a phase of slow, steady growth that lasted until 2021 (when it peaked at 71.7%), class attendance has gradually decreased over the last two years (-3.3 percentage points), returning to the values of ten years ago (in 2013 it was 68.0%). This contraction is most evident among two-year masters (-5.5 percentage points compared to 2021).

As already mentioned, 67.7% of first-level graduates stated that they regularly attended classes. Here also there are relevant differences among fields of study. Class attendance is particularly high in health (89.5%), architecture and construction (83.5%), engineering and engineering trades (77.5%) and natural sciences, mathematics, physics and statistics (72.5%). Conversely, class attendance is relatively lower among graduates in education (45.5%) and psychology (50.4%).

Overall, 63.2% of single-cycle second-level graduates reported having attended classes regularly. However, this is the result of strongly differentiated situations by field of study: among architecture and construction and veterinary students, attendance was decidedly broad and widespread (respectively 88.6% and 87.9%), while graduates in law, who make up 30.0% of the total number of single-cycle second-level graduates, attend relatively little (only 44.6% attend classes regularly).

The two-year master graduates were particularly diligent in their attendance (71.1%). Class attendance differs appreciably according to the field of study, from the highest in architecture and construction (86.3%), engineering and engineering trades (78.4%) and natural sciences, mathematics, physics and statistics (74.4%) to the lowest in education (38.6%).

Figure 6 - 2023 graduates: regular attendance of at least 75% of lectures by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

# 4.2. Scholarships and other student support services

Among graduates in 2023, besides scholarships (26.7%) the services used at least once and provided by the right to education body were canteens/foodservice (28.0%), book loans (23.6%), transport subsidies (22.3%), aid for international mobility (16.0%), vouchers for the purchase of books and computer equipment (11.9% and 10.5% respectively), rent subsidies (9.6%), part-time work (8.7%) and housing (4.0%).

In general, graduates are satisfied with the student support services provided by the institution for the right to education, with peaks of 87.7% for the loan of books. Conversely, graduates are less satisfied with rent subsidies (58.8% 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 (+4.5 percentage points compared to 2013, though the increase was more evident 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 NoTax area and ISEE bands for which full or partial exemptions are provided).<sup>15</sup> Over the same period, graduate satisfaction with both the timing of scholarship disbursement (+14.8 percentage points compared to 2013) and the adequacy of the amount (+11.9 percentage points) increased significantly. Scholarships are less frequent among single-cycle second-level graduates (21.4%) due to their more favoured socio-economic background, while they are used by 27.1% of two-year master graduates and 27.4% of first-level graduates. The use of scholarships is also differentiated by field of study. In fact, this is particularly the case in both first-level and two-year masters' graduates in education and foreign languages. Moreover, further analyses found that compared to non-scholarship holders, graduates with scholarships attend lectures more regularly, have

<sup>&</sup>lt;sup>15</sup> 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 and Italian Law no. 178 of 30 December 2020 (Article 1, paragraph 518, implemented by Italian Ministerial Decree no. 1014 of 3 August 2021).

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. Language and computer skills

# 5.1. Language skills

At the end of their university studies, students provide a self-assessment of their foreign language skills, based on the levels defined in the Common European Framework of Reference for Languages. 62.9% self-assessed their knowledge of written English with "at least B2" level, while the knowledge of other languages is much lower. In fact, in terms of written skills with "at least B2" level, 11.9% know Spanish, 7.7% French and 2.9% German. As far as language skills are concerned, the survey questionnaire has only been adapted to the Common European Framework for a few years, so it is not possible to analyse trends over a long-time span. However, what emerges from the comparison with previous surveys is a trend growth in English language skills (as far as written English proficiency "at least B2" level, the increase is more than 9 percentage points compared to 2019 graduates).

By focusing on the English language, written knowledge ("at least B2" level) concerns 56.3% of first-level graduates, 64.2% of single-cycle second-level graduates and 73.3% of two-year master's degree graduates. This result is probably influenced by the higher proportion of two-year master's courses entirely or partially in English, which have increased considerably in recent years. There are clear differences according to the field of study: among first-level graduates, knowledge of English "at least B2" level is particularly high, for clear reasons, in foreign languages (91.3%), followed by engineering and engineering trades (68.1%) and information and communication technologies (66.3%). In contrast, it is significantly lower among graduates in education (23.0%) and sports sciences and physical education (31.3%). Among single-cycle second-level graduates, knowledge of written English ("at least B2" level) is particularly high among graduates in education (84.3%), while it is significantly lower than average in architecture and construction as well as in law (48.3% and 52.9% respectively). For two-year masters, English knowledge "at least B2" level relates to almost all graduates in foreign languages (94.3%), but it is also high among graduates in information and communication technologies (89.8%) and engineering and engineering trades (84.2%); lower values in health (42.3%) and education (43.5%).

#### 5.2. IT skills

The level of knowledge of IT tools is another important indicator of the skills acquired by students at the end of their course of study. With reference to the ten aspects surveyed, internet browsing and communication is by far the most widespread: knowledge is "at least good" for 88.7% of 2023 graduates. This is followed, in decreasing order of knowledge, by word processor (72.0%), operating systems (71.9%), presentation tools (71.2%) and spreadsheets (58.8%). The least known are programming languages (15.4%), assisted design (12.6%), databases (12.0%), data transmission networks (11.1%) and

<sup>&</sup>lt;sup>16</sup> The classification is based on the Common European Framework of Reference for Languages (CEFR), which has six common reference levels: A1, A2, B1, B2, C1, C2. For a detailed description of the various levels see <a href="mailto:europass/system/files/2020-05/CEFR%20self-assessment%20grid%20IT.pdf">europa.eu/europass/system/files/2020-05/CEFR%20self-assessment%20grid%20IT.pdf</a>.

website creation (10.2%). Compared to first-level and single-cycle second-level graduates, two-year masters are distinguished by a greater knowledge of all IT tools. Knowledge of the first five IT tools mentioned above tends to be universal across fields of study, although they are more familiar to graduates in information and communication technologies (ICTs), architecture and construction and engineering and engineering trades. On the other hand, the less widespread IT tools are strongly affected by the features of each course of study. For example, assisted design is an IT tool known in particular by graduates in architecture and construction (98.0% of single-cycle second-level graduates), while programming languages, databases, website creation and data transmission networks are IT tools known in particular by graduates in information and communication technologies (ICTs) (among two-year masters, 91.6%, 79.9%, 61.6% and 56.9% have a level of knowledge "at least good" respectively).

In terms of trends, the level of knowledge of IT tools has generally decreased over the last ten years (with the exception for operating systems and presentation tools). This is probably the result of the generational evolution of the university student population, which is also inevitably reflected in IT skills. In fact, generations Y and Z, who account for almost all graduates in 2023, are known to have increased digital skills that are not necessarily directly attributable to those mentioned above.

# 6. 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 high school/secondary school diploma, there is a considerable regularity in enrolment, since in most cases enrolment takes place after graduation. In fact, 84.1% 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 (86.1%).

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 (64.1%), mainly due to delays accumulated during the first-level degree. In fact, 36.4% of the two-year masters completed the previous three-year course with at least one year's delay.

The average graduation age for 2023 graduates is 25.7, with obvious differences depending on the degree type: 24.5 years for first-level graduates, 27.1 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 2013 it was 26.6 years), although in the last year the decline has stopped (+0.1 years compared to 2022). In any case, the decline in the average age at graduation over the past ten years is most pronounced among first-level graduates (-1.0 years).

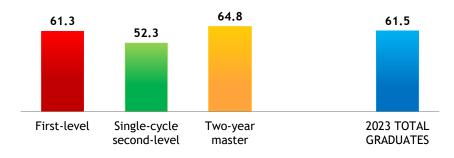
The average age at graduation among 2023 first-level graduates fluctuated between 23.7 years in engineering and engineering trades and 28.5 years in law (for these graduates the high age at graduation is due in particular to the fact that 42.4% enrol two or more years later than the standard

age of 19). The average age at graduation of single-cycle second-level graduates 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 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 (30.1 years) and education (28.7 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, which measures the ability to complete the course of study within the timeframe set by regulations, concerned 61.5% of 2023 graduates (Figure 7). Until 2022 there was a steady and marked improvement in the degree completion time of studies, which increased in recent years due to the extension of the academic year closure granted to students for the Covid-19 emergency.<sup>17</sup>

However, in 2023, for the first time in 12 years, there was a slight decrease in the share of graduates completed their course on time (-1.0 percentage point compared to 2022), despite the confirmation of the extension of the academic year. This contraction is more evident among two-year masters (-1.6 percentage points) than among first-level graduates (-1.1 points), while it did not affect single-cycle second-level graduates, for whom degree completion time of studies continued to increase (+0.6 points). However, the increase of degree completion time of studies over the last decade was very substantial: in 2013, 42.9% of all graduates completed their studies on time. By contrast, while ten years ago 12.9% of graduates completed their course of studies four or more years beyond prescribed degree completion time, today this proportion is more than halved (5.4%).

Figure 7 - 2023 graduates: completion of the course of study within the prescribed degree completion time by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

Degree completion time appears consolidated and continues to apply to a high share of first-level graduates (61.3%). As many as 73.3% of the graduates in psychology complete their studies within the three years prescribed by regulations. At the other extreme, 43.3% of the graduates in architecture and construction manage to graduate on time.

<sup>&</sup>lt;sup>17</sup> Degree completion time of studies depends on the date of graduation, the date of enrolment in the course of study and the normal duration of the course of study, taking into account the degree sessions of the academic year (the third and final session ends on 30 April). 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 the first time. The extension to 15 June was also established by subsequent decrees for 2021, 2022 and 2023.

As for single-cycle second-level graduates, 52.3% of them obtained their degree within the time prescribed for graduation. Here too, diversified situations result in each field of study: both graduates in education (such course was established over the last few years) and health and pharmacy are regular (77.7% and 53.1% respectively). On the other hand, only 22.0% of graduates in architecture and construction and 43.9% in veterinary are regular.

Compared to first-level graduates, there is even greater degree completion time for two-year masters, where 64.8% of graduates complete their studies with peaks of over 75% for graduates in law and sports sciences and physical education (both 79.3%) and health (76.6%). On the other hand, graduates from architecture and construction, humanities and literature, engineering and engineering trades and arts and design are less regular (with percentages of 41.6%, 53.1%, 55.3% and 56.3% respectively).

# 6.1. 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 the prescribed duration of the course of study. This index allows the delay to be measured regardless of the duration of the course of study. 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 0.34, which means that on average they take 34% longer to complete their studies than the prescried duration of the course. Single-cycle second-level graduates take 28% longer (delay index of 0.28), while two-year master's graduates take 39% longer than the prescribed two-year period (0.39).

The analysis took into account the following factors: *gender*, parents' educational qualifications, *citizenship*, high school/secondary school diploma marks, *average provincial score of the 2023 Invalsi tests in Italian*, *degree type*, field of study, geographic mobility for study purposes, professional reasons for enrolling at university, class attendance, work while studying, study abroad experience and receipt of a scholarship.<sup>18</sup>

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 48.3% 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 around 4.5 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 32.4% longer to obtain a degree compared to those who scored top marks at high school/secondary school.

\_

<sup>&</sup>lt;sup>18</sup> The variables in italics were included in the model but not shown in Table 1 for reasons of simplification given their modest contribution. The following factors were instead excluded from the model due to their negligible contribution: social status, type of high school/secondary school diploma, delayed enrolment in the course of study, cultural reasons for enrolling at university, size of the university, distance between housing and place of study, renting housing during studies, doing internships recognised by the course of study. A model with the same definition of covariates was applied to a logarithmic transformation of the delay index, confirming the results here presented.

Table 1 - 2023 graduates: linear regression model for the assessment of the delay index

	b	S.E.
High school/secondary school diploma mark (average, out of 100)	-0.01	0.00
Parents' educational qualifications (both with a university degree=0)		
only one with a university degree	0.02	0.00
upper secondary school diploma	0.05	0.00
professional qualification, lower educational qualification, or no qualification	0.10	0.00
Field of study (Sports sciences and physical education=0)	577000000000000000000000000000000000000	
Agriculture, forestry and veterinary	0.26	0.01
Architecture and construction	0.48	0.01
Arts and design	0.24	0.01
Economics	0.14	0.01
Education **	0.00	0.01
Engeneering and engeneering trades	0.35	0.01
Foreign languages	0.26	0.01
Health and pharmacy	0.14	0.01
Humanities and literature	0.31	0.01
Information and communication technologies (ICTs)	0.34	0.01
Law	0.16	0.01
Natural sciences, mathematics, physics and statistics	0.26	0.01
Politics, social sciences and communications	0.14	0.01
Psychology	0.09	0.01
Geographic mobility for study (secondary school diploma in the North and degree in the	North=0)	
secondary school diploma abroad and degree in Italy *	0.06	0.02
secondary school diploma in the South and degree in the Centre	0.10	0.01
secondary school diploma in the South and degree in the North	0.08	0.01
secondary school diploma in the South and degree in the South	0.15	0.01
secondary school diploma in the Centre and degree in the South	0.11	0.02
secondary school diploma in the Centre and degree in the North *	0.02	0.01
secondary school diploma in the Centre and degree in the Centre	0.08	
secondary school diploma in the North and degree in another geographic area **	-0.01	0.01
Relevance of professional reasons for the choice of the degree programme (relevant=0	)	
not relevant	0.05	0.00
Attended classes on a regular basis (more than 75% of prescribed classes=0)		
less than 25%	0.23	0.01
25% to 50%	0.15	0.00
50% to 75%	0.08	0.00
Work during studies (no work experience=0)		
working students	0.29	0.00
studying workers	0.08	0.00
Recognised abroad experience (completed=0)		
not completed or not recognised	0.08	0.00
Scholarship holder (yes=0)		
no	0.11	0.00
Costant**	0.00	0.01

Note: R-squared = 0.118 (ajusted R-squared = 0.118), N = 254,923

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

Source: AlmaLaurea, Graduates' Profile Survey.

<sup>\*</sup> Significance at 5% (p<0.05). \*\* Not significant.

Also influencing the speed of finishing one's studies is the approach taken to lectures, including class attendance. Specifically, compared to a graduate who attends classes assiduously (for more than 75% of the lectures), those who attend less than 25% of classes take 23.3% longer than the usual duration of the course of study, while those who attend classes between 25% and 50% of classes take 14.9% longer and those who attend between 50% and 75% of classes take 8.1% longer. Similar effects can be observed for work experiences gained during studies: for studying workers the accumulated delay is 28.6% more than for those who never worked during their studies, while for working students it takes 7.7% longer.

Compared to those who have studied abroad recognised by the course of study, those who have not gained any such experience (or have done so on their own initiative) take 8.4% longer than the usual duration of the course of study. Moreover, those who did not receive a scholarship take 11.2% longer than those who did. In fact, in order to qualify for a scholarship it is necessary to obtain a certain number of credits during the academic year, by passing the exams on time.

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/secondary school diploma in the North (regardless of the location of their university) and those who got their high school/secondary school diploma in the Centre and continued their studies in the North are quicker to complete their university studies. Those who graduate from a university in the Centre, having got their high school/secondary school diploma in the South, take 10.4% longer than those who got 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 South, take 15.4% longer.

Considering the parents' educational qualification as an indicator of the graduate's family background, it can be seen that on average those who have parents with at most a vocational qualification take 10% more time than those who have both parents with a university degree.

Furthermore, degree completion time is lower (+5.2% of more time than the usual duration) among those who chose the course of study not motivated by professional reasons, compared to those who chose the course driven by professional reasons.

#### 7. Graduation mark

The average graduation mark recorded among graduates in 2023 was 104.0 out of 110, a value that has been trending upwards in recent years (it was 102.4 out of 110 in 2013). This growth, slight and constant since 2015, was particularly marked between 2021 and 2022 (+0.5 points) before stabilising in 2023. In general, the largest increase over the past ten years was seen among single-cycle second-level graduates (+2.2 points compared to 2013). In this respect, among 2023 graduates there were appreciable differences by degree type: 101.2 for first-level graduates, 106.2 for single-cycle second-level graduates and 107.8 for two-year masters (Figure 8).

101.2 106.2 107.8 104.0

Two-year

master

Figure 8 - 2023 graduates: graduation mark by degree type (average, out of 110)

Single-cycle

second-level

Note: when calculating averages, the mark of 110 cum laude was converted to 113.  $\frac{1}{2} = \frac{110}{2} = \frac{110}{2$ 

Source: AlmaLaurea, Graduates' Profile Survey.

First-level

As noted, while the average mark for first-level graduates is 101.2, there is a certain heterogeneity among fields of study, with final marks ranging from 97.7 for economics to 97.8 for engineering and engineering trades to 105.0 for health to 105.2 for humanities and literature.

**2023 TOTAL** 

**GRADUATES** 

The average graduation mark for single-cycle second-level graduates, 106.2 out of 110, shows a smaller range of variation, from 103.4 among graduates in law to 107.7 among graduates in architecture and construction and those in health and pharmacy.

The two-year masters show a very high average graduation mark (107.8), 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 6 points compared to the degree obtained in the first level. The two-year master fields of study having relatively lower average final marks are engineering and engineering trades and economics (both 106.3).

# 7.1. Focus on the graduation mark insight: results of a linear regression model

To analyse the determinants of the graduation mark, a linear regression model was applied (Table 2). The analysis took into account the following factors: *gender*, *parents' educational qualifications*, *citizenship*, high school/secondary school diploma type, high school/secondary school diploma marks, degree type, field of study, geographic mobility for study purposes, cultural reasons for enrolling in the university, class attendance, receipt of a scholarship and work while studying.<sup>19</sup>

<sup>19</sup> 

<sup>&</sup>lt;sup>19</sup> The variables in italics were included in the model but not shown in Table 2 for reasons of simplification given their modest contribution. The following factors were instead excluded from the model because of their negligible contribution: social status, average provincial score of the 2023 Invalsi tests in Italian, delayed enrolment in the course of study, professional reasons for enrolling at university, size of the university, distance between housing and place of study, renting housing during studies, doing internships recognised by the course of study.

Table 2 - 2023 graduates: linear regression model for the assessment of final graduation marks

	b	S.E.
Diploma (vocational=0)		
high school	3.62	0.07
technical	1.80	0.07
High school/secondary school diploma mark (average, out of 100)	0.26	0.00
Degree type (First-level=0)		
Single-cycle second-level	2.13	0.05
Two-year master	7.38	0.03
Field of study (Engeneering and engeneering trades=0)		
Agriculture, forestry and veterinary	5.41	0.09
Architecture and construction	4.08	0.08
Arts and design	6.87	0.08
Economics	1.64	0.05
Education	6.62	0.07
Foreign languages	4.32	0.06
Health and pharmacy	7.18	0.05
Humanities and literature	5.94	0.06
Information and communication technologies (ICTs)	2.89	0.10
Law	4.35	0.08
Natural sciences, mathematics, physics and statistics	3.60	0.05
Politics, social sciences and communications	4.73	0.06
Psychology	4.69	0.07
Sports sciences and physical education	5.51	0.09
Geographic mobility for study (secondary school diploma in the South and degree in the	North=0)	
secondary school diploma abroad and degree in Italy	0.89	0.29
secondary school diploma in the South and degree in the Centre	1.98	0.07
secondary school diploma in the South and degree in the South	3.02	0.06
secondary school diploma in the Centre and degree in the South	3.83	0.18
secondary school diploma in the Centre and degree in the North	2.67	0.09
secondary school diploma in the Centre and degree in the Centre	4.00	0.06
secondary school diploma in the North and degree in another geographic area	4.92	0.11
secondary school diploma in the North and degree in the North	2.86	0.05
Relevance of cultural reasons for the choice of degree programme (not definitely yes=0	)	
definitely yes	1.46	0.03
Attended classes on a regular basis (less than 25% of prescribed classes=0)		
25% to 50% *	0.09	0.08
50% to 75%	0.52	0.07
more than 75%	2.23	0.06
Work during studies (studying workers=0)	0	
working students	0.89	0.05
no work experience	1.38	0.05
Took advantage of scholarships (no=0)		
yes	0.87	0.03
Costant	81.00	0.13

Note: R-squared = 0.415 (adjusted R-squared = 0.415), N = 258,449

Source: AlmaLaurea, Graduates' Profile Survey.

 $<sup>^{\</sup>star}$  Not significant. Where not explicitly stated, parameters significant at 1% (p<0.01).

The model confirms the presence of a relevant difference based on degree type: all other things being equal, compared to a first-level graduate it is estimated that a single-cycle second-level graduate will achieve final marks that are 2.1 points higher (out of 110) while a two-year master's graduate will achieve marks that are 7.4 points higher. A strong heterogeneity in terms of fields of study is also confirmed. A degree in health and pharmacy results in a boost in terms of degree marks of 7.2 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 in high school obtain a graduation mark 10 points higher than a high school/secondary school graduate who has obtained the minimum diploma mark (60 out of 100). In this respect, a graduate with a high school diploma and a graduate with a technical secondary school diploma obtain, all other things being equal, more points than a graduate with a vocational secondary school diploma (3.6 points and 1.8 points respectively). Again, similarly to what is highlighted in the model relating to degree completion time, the way the course of study is approached has a certain impact on university performance, measured in terms of graduation mark. Specifically, compared to a graduate who attends less than 25% of the scheduled lectures, those who attend more than 75% of the lectures achieve graduation marks that are more than 2 points higher.

There are also differences about territorial area associated with geographic mobility for study purposes. 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 completed all their studies in the Centre score 4 points higher and those who move from the North to another place score 5 points higher.

Those who enrolled with strong cultural reasons ended their university experience with marks 1.5 points higher than those who considered this reason less important. The influence of work experience while studying, compared to studying workers, working students score almost one point higher, while those with no work experience score 1.4 higher. Finally, those who received a scholarship score almost one grade higher than those who did not receive this type of study support.

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 graduates<sup>20</sup> 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.

<sup>&</sup>lt;sup>20</sup> AlmaLaurea (2021), 23rd Graduate Profile Survey 2020. 2021 Report, <a href="www.almalaurea.it/sites/default/files/2022-07/sintesi\_profilo\_rapporto\_2021\_en.pdf">www.almalaurea.it/sites/default/files/2022-07/sintesi\_profilo\_rapporto\_2021\_en.pdf</a>.

### 8. Opinions about university experience

The opinions expressed by the graduates involved in AlmaLaurea surveys reveal a general satisfaction with the various aspects of their study experience, regardless of the degree type completed. As described in previous reports, the pandemic did not affect evaluations so much as the use of some university facilities and services, which decreased significantly until 2022. However, such use has picked up slightly in the last year thanks to the gradual return of students to the classroom, although the values recorded in 2023 were still far from pre-pandemic levels. The largest increase was seen for equipment for teaching (+3.0 percentage points compared to 2022). The increase in use levels over the past year was most pronounced among two-year masters, i.e. among graduates who had shown a more pronounced drop until 2022. Extending the observation timeframe, it was relevant the decrease in the share of those who used computer workstations (-14 points compared to 2013), library services (about -13 points) and equipment for teaching such as laboratories and practical work (about -5 points). 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.

With regard to 2023, 88.7% of the graduates declare themselves satisfied with their relations with teachers (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 97.0% of graduates, 82.8% considered them to be "always or almost always adequate" or "often adequate". Library services (e.g. lending/consultation and opening hours), used by 75.7% of graduates, receive a positive assessment (the rating scale used in the questionnaire considers the sum of 'definitely positive' and 'fairly positive') from 93.1% of users. Computer workstations used by 63.1% of graduates were judged to be "available in an appropriate number" by 63.0% of users. Individual study areas were used by 74.0% of students and 65.1% considered them "appropriate". With regard to the evaluation of the equipment for teaching, such as laboratories and practical activities, among those who used them (75.4%) there was an overall satisfaction of 79.1% (sum of those who rated it as "always or almost always adequate" and "often adequate").

Among the other services offered by the university, 2023 graduates say they made extensive use of the student administrative offices (90.6%), distantly followed by post-graduate study orientation services (60.9%), job orientation training initiatives (56.4%), job search support services (53.1%) and finally the job placement service (53.0%). The users of these services were only moderately satisfied with these services compared to the others assessed (the rating scale used in the questionnaire considers the sum of "definitely yes" and "more yes than no"): 67.6% for the job placement service, 65.6% for student administrative offices, 65.1% for post-graduate study orientation, 63.2% for job orientation training initiatives and finally 60.3% for job search support.

The organisation of exams (including exam sessions, timetables, information, bookings) was rated as adequate ("always or almost always" or "for more than half of the tests") by 84.1% of the graduates. Furthermore, 84.1% of the graduates felt that the workload was overall adequate 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 with the exception of spaces for individual study, organisation of exams and classrooms, which fell slightly last year (-2.1, -1.5, -1.1 percentage points, respectively).

A summary of the various aspects of the university experience can be seen in the overall satisfaction of 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 2013 it was 86.0%.

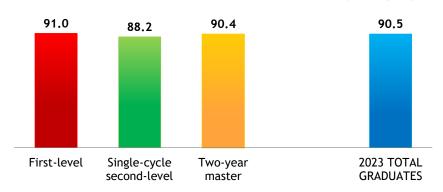


Figure 9 - 2023 graduates: overall satisfaction of the course of study by degree type (percentage values)

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: 91.0% say they are satisfied overall with the course of study they completed. The most satisfied are first-level graduates in education (95.6%), law (93.6%), psychology (93.2%), as well as natural sciences, mathematics, physics and statistics (92.6%) and humanities and literature (92.4%). Despite the gap is generally small, graduates in foreign languages (85.2%) tend to be more critical.

Among single-cycle second-level graduates, 88.2% said they were generally satisfied with their university experiences. The most satisfied were graduates in education (93.4%) and law (91.2%). Conversely, those who were less satisfied came from health and pharmacy (84.9%), architecture and construction (86.8%) and from veterinary sciences (87.6%).

The overall satisfaction level of two-year master's graduates with their most recent university experience is 90.4%. The most satisfied are the graduates in humanities and literature (93.1%), engineering and engineering trades (92.3%), economics (91.8%) and psychology (91.5%). The most critical are graduates in sports sciences and physical education (81.7%) and graduates in health (83.3%).

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 in the same course of study?". 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 72.1% of the entire population (Figure 10), a percentage that is higher than that of 2013 (66.9%), but slightly down in the last two years (in 2021 it was 72.9%). 8.9% of graduates would confirm the university, but would move on to another course of study, 10.8% would follow the same course of study but changing to a different university, 5.4% would change both course of study and location. Finally, only 2.4% would no longer enrol at the university (as for the two-year masters, reference is made only to the final two years).

71.1 69.4 74.5 72.1

First-level Single-cycle second-level master 2023 TOTAL GRADUATES

Figure 10 - 2023 graduates: chance to enrol again at university by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Among first-level graduates, 71.1% would fully confirm the choice they made at the time of enrolment (same course same university). Another 10.3% would remain at the same university but would opt for a different course of study; 10.6% 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 1.9% would no longer enrol at the university. First-level graduates in psychology (77.1%), law (76.7%) and education (76.4%) 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 s (56.6%), who would often change their course of study, universities or both.

If they could go back, 69.4% of the single-cycle second-level graduates would repeat the choice of the course of study and the university (compared to 80.8% of the graduates in education and 63.3% in veterinary). 17.6% 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 linked to passing 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 74.5% of graduates. Here also there are different situations among fields of study: from 79.7% of the graduates in humanities and literature to 69.6% of graduates in foreign languages.

#### 9. Post-graduate study prospects

Among 2023 graduates, pursuing education after graduation is the intention of 67.1% of graduates (Figure 11). This share has tended to grow over time (it was 62.9% in 2013) despite the contraction observed in the last two years (it was 68.6% in 2021). Specifically, attention should be drawn to the relevant growth among first-level and single-cycle second-level graduates in the last decade: compared to 2013 there was an increase of almost +6.5 percentage points among the former and +4.5 points among the latter. The contraction recorded in the last two years is more pronounced with regard to the continuation of first-level graduates with a two-year master's degree.

As might be expected, the trend to continue one's studies is particularly marked among first-level graduates (82.1%), who intend to move largely towards a two-year master's degree (64.7%), and among

single-cycle second-level graduates (70.3%), for whom post-graduate schools (33.2%), academic masters (10.6%) and internships/legal internships (9.4%) are the most frequently prospect. Although the two-year graduates are relatively less likely to continue their studies (41.7%), some of them intend to continue with a PhD: 14.6%.

First-level Single-cycle Two-year according to the second-level master GRADUATES

Figure 11 - 2023 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 (95.7%), humanities and literature (91.4%), sports sciences and physical education (90.5%) and natural sciences, mathematics, physics and statistics (90.0%). On the other hand, graduates in the information and communication technologies (ICTs) (62.4%), law (67.5%) and education (70.3%) are less convinced that they want to continue their studies. 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 64.7% of graduates: it is particularly wished for by graduates in psychology (91.1%), engineering and engineering trades (86.0%), natural sciences, mathematics, physics and statistics (83.2%) as well as humanities and literature (82.8%). In detail, 71.6% 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 94.7% in health (where the number of those who intend to continue their studies with a two-year master's degree is definitely low) to 53.0% 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. 64.0% 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 76.0% in architecture and construction to 52.3% in politics, social sciences and communications).

70.3% of single-cycle second-level graduates plan to continue their studies. This willingness varies significantly by field of study: it is high among graduates in health and pharmacy (80.9%, with 61.3% oriented towards a post-graduate school) and veterinary (78.8%, with 37.4% oriented towards a post-graduate school), while it is average among graduates in law (70.2%, with 28.6% intending to engage in practical training). On the other hand, the intention to continue studies is lower among graduates in architecture and construction (42.2%, 12.9% oriented towards an academic master and 10.8% towards a PhD), as well as education (49.2%, 12.1% oriented towards a post-graduate school and 7.7% towards an academic master).

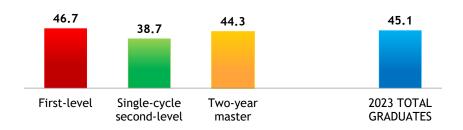
41.7% of two-year masters intend to continue their studies. Specifically, these are two-year master's in psychology (83.4%, with 29.8% planning a post-graduate school and 25.0% an internship), health (57.5%, with 30.0% planning an academic master), humanities and literature (57.4%, with 27.9% planning a PhD) and natural sciences, mathematics, physics and statistics (56.7%, with 33.0% planning a PhD). Graduates in engineering and engineering trades (24.0%, 13.8% with a PhD), economics (25.0%, 9.4% with an academic master) and information and communication technologies (ICTs) (26.4%, 17.8% with a PhD) are less likely to continue their studies.

### 10. Prospects for employment

Regarding prospects for employment, the consolidated south/north mobility for study and work purposes that has persisted in our country for some time now has expanded to include mobility towards foreign countries. This last type of mobility is 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.

45.1% of graduates state they are willing to work abroad, a percentage that is 2.7 percentage points lower (among single-cycle second-level graduates it drops as much as -10.6 percentage points) compared to 2013 (when it was 47.8%). After annual increases that lasted until 2015 (when the percentage exceeded 50%), a contraction has been seen in recent years, especially in 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 degree type, this share is 46.7% for first-level graduates, 38.7% for single-cycle second-level graduates and 44.3% for two-year masters' graduates (Figure 12). The graduates most willing to work abroad are those in foreign languages (56.6%) and information and communication technologies (ICTs) (52.4%), followed by those in politics, social sciences and communications and engineering and engineering trades (both 51.2%). 27.7% even say they are ready to move to another continent.

Figure 12 - 2023 graduates: decidedly willing to work abroad by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

At the same time, there is a widespread willingness to travel for business, even frequently (28.0%), as well as to relocate (40.6%), although these percentages have been declining over the last ten years. Only 5.0% of 2023 graduates are not willing to travel, a proportion that has risen slightly over the past five years. 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 jobs are the labour contracts most sought by graduates (81.8% and 79.9% are respectively decidedly willing to accept them), there is also a willingness to accept part-time jobs (35.1%) and fixed-term labour contracts (31.7%). In recent years there has been a strong increase in the willingness to engage in smart working or teleworking (44.3%), an option that is increasingly used by companies and that was highly appreciated by graduates during the pandemic (almost 33 percentage points higher than in 2013, the result of a substantial increase of almost 24 percentage points observed between 2019 and 2023).

The change in expectations regarding the working world is particularly evident from an analysis of the evolution attributed by graduates to the various aspects for job-seeking. Among the aspects considered most relevant, for some time now what matters most is the acquisition of professional skills, specified by 77.6% of graduates. Very relevant (percentages above 60%) are also job security (71.9%), career prospects (70.7%), earning prospects (70.0%), independence or autonomy at work (63.7%) and the possibility of making the best use of the skills acquired during studies (61.9%). Note however that since 2016, the year from which all the aspects currently assessed by the questionnaire are surveyed, increases of more than 19 percentage points have been observed for the pursuit of free time (reaching 50.7% in 2023), of about 15 points for flexibility of working hours (44.5% in 2023), of about 13 points for the possibility of earning prospects (70.0% in 2023) and of almost 11 points for the pursuit of independence and autonomy (63.7% in 2023). 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 have no connection with your degree?", there was a broad willingness on the part of graduates: among 2023 graduates, 23.4% would accept unconditionally, 55.3% only as a temporary solution, while only 19.9% would reject an unrelated job. Compared to 2016, the first year for which data are available, there was an almost 9% decrease in those who would unconditionally accept a job that is not related to their studies.

In 2023, 82.3% say they would not accept a monthly net amount 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.
Unless otherwise specified, reproduction for non-commercial purposes with a reference to the source is authorised.
Consorzio Interuniversitario AlmaLaurea
viale Masini, 36 - 40126 Bologna tel. +39 051 6088919 fax +39 051 6088988
www.almalaurea.it



Viale Masini, 36 - 40126 Bologna Tel. +39 051 6088919 Fax +39 051 6088988

> supporto.laureati@almalaurea.it servizio.aziende@almalaurea.it supporto.universita@almalaurea.it www.almalaurea.it