

24th Report 2021 Graduates' Profile

2022 Summary Report

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Summary of the 24th Survey on the 2021 Graduates' Profile (2022 AlmaLaurea Report)

The Graduates' Profile examines 299,320 graduates over the 2021 calendar year.¹ The 77 Universities involved in the survey, where about 90% of Italian graduates² obtain their degrees, are distributed throughout the country with a certain homogeneity: 28 in the North, 23 in the Centre, 26 in the South and on the Islands. In 2021, six of these universities (Bologna, Sapienza University of Rome, Turin, Padua, Naples Federico II and University of Milan) had more than 10,000 graduates.

The total number of graduates includes: 168,685 first-level graduates (representing 56.4% of the total graduates in 2021); 34,510 single-cycle second-level graduates (11.5%); 95,252 two-year masters (31.8%); 111 in the pre-reform course of study in Primary Education Sciences (0.1%);³ 762 in other pre-reform courses of study⁴ (now accounting for only 0.3% of the total). 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 include single-cycle second-level graduates. The questionnaire was completed by 281,172 graduates who represent 93.9% of the total population surveyed.

The study here 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 joined with a high school/secondary school diploma. The first-level courses includes 15 fields of study, with a greater concentration in economics (16.1%), health (11.9%), engineering and engineering trades (11.7%), politics, social sciences and communications (10.5%) as well as 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 (46.2%), law (31.8%), education (12.4%, with only the degree class in Primary Education Sciences), architecture and construction (7.5%), veterinary (2.0%), humanities and literature (in 2021, only 74 graduates - that is 0.2% - are in the Conservation and Restoration of Cultural Heritage course of study).

Two-year master's degrees are open to graduates who have already obtained at least a first-level degree. Two-year masters are found in 15 subject areas and concentrated mainly in: economics (17.6%); engineering and engineering trades (16.1%); natural sciences, mathematics, physics and statistics (13.9%); politics, social sciences and communications (9.8%). The considerations presented below exclude graduates (the so-called pre-reform graduates) from courses belonging to the system prior to the reform of Ministerial Decree no. 509/1999, due to the particularly low number of graduates.

¹ The complete documentation is available at www.almalaurea.it/en/our-data/almalaurea-surveys/graduates-profile.

² After some experimental work, AlmaLaurea has been carrying out annual surveys on the Profile and Occupational condition of PhD and Academic Master graduates since 2015. The results of the most recent surveys are available at www.almalaurea.it/en/our-data/almalaurea-surveys.

³ With the Italian Ministerial Decree no. 249/2010, the new single-cycle second-level course of study in Primary Education Sciences (LM 85-bis) of 5-years duration was established. It actually replaces the previous four-year course of study - the only one not reformed by the Italian Ministerial Decree no. 509/1999. The first activations started from the 2011-2012 academic year.

⁴ Pre-reform courses of study are those started prior to the reform of the Italian Ministerial Decree no. 509/1999. Such courses are about to gradually cease to exist.

Furthermore, in the joint analysis by field of study and degree type, the two-year masters in law and the single-cycle second-level graduates in humanities and literature (graduates of the courses in Conservation and restoration of the cultural heritage instituted by the Ministerial Decree of 2 March 2011) are not taken into consideration due to their small size.

Among 2021 graduates, some effects of the pandemic that had not yet had time to emerge in 2020 since the survey monitors the entire university experience have begun to manifest themselves. Specifically, as might be expected, study abroad decreased substantially as did the use of certain university facilities such as computer workstations, libraries, labs and individual study spaces. When analysing the 2021 data, 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, for example, the effects are more pronounced among shorter university courses, in particular among two-year and three-year master's degrees, than among single-cycle second-level graduates. 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 a long time, women represent 59.4% of all graduates in 2021.⁵ Such a share has tended to be stable over the last ten years.⁶ Women account for 67.4% of single-cycle second-level course of study, that is, +10.9 percentage points than among two-year masters (56.5%) and +8.0 percentage points than among first-level graduates (59.4%).

There is a strong differentiation in the gender composition of the various fields of study, confirming the lower propensity of women to choose STEM courses of study (science, technology, engineering, mathematics).⁷ In the first-level courses, women constitute a marked majority in education (93.1%), foreign languages (85.1%), psychology (81.5%), health (75.6%) and arts and design (71.8%). Conversely, they represent a minority in information and communication technologies (13.7%), engineering and engineering trades (26.6%) and sports sciences and physical education (33.0%). A similar distribution can also be observed within the two-year master's degree: there is a strong female prevalence in education (92.7%), foreign languages (85.8%), psychology (81.9%) and arts and design (74.4%), while women are very few in information and communication technology (ICTs) (18.5%). In single-cycle second-level courses of study, women prevail in all fields of study: from 95.7% in education to 61.5% in architecture and construction.

⁵ On the topic of gender differences, in January 2022 AlmaLaurea published the report "Laureate e laureati: scelte, esperienze e realizzazioni professionali".

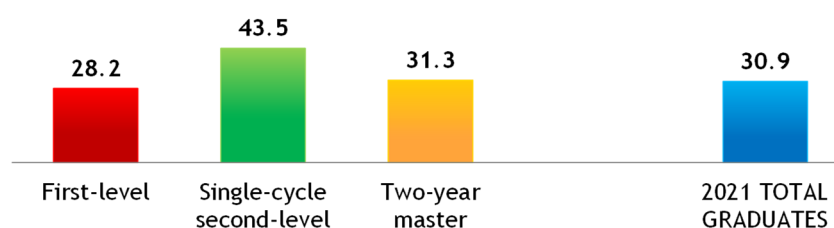
⁶ Even though the composition of AlmaLaurea's graduates in 2011 was different from the current class, both in terms of number of universities and of degree type (pre-reform, first and second level), specific insights in the same number of participating universities confirmed the substantial constancy over time of the comparisons.

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

As for social mobility, unlike the Italian population, the graduates analysed are over-represented among those who come from family backgrounds that are favoured in socio-cultural terms. 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.⁸ This share is appreciably higher - 21.1% - among the fathers of graduates surveyed by AlmaLaurea. The comparison between the Italian female population and the mothers of graduates leads to similar conclusions (the shares are 16.1% and 21.8% respectively). This means that the parents of graduates have more frequently obtained a university degree than the population as a whole of the same age. By jointly considering the education levels of both fathers and mothers of graduates analysed by AlmaLaurea, 30.9% of them have at least one parent with a university degree (26.9% in 2011). This share ranged from 28.2% of first-level graduates to 31.3% among two-year masters and 43.5% among single-cycle second-level graduates (Figure 1).

Figure 1 - 2021 graduates: at least one parent with a university degree obtained by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

An interesting finding is whether the field of study in which parents and children obtained their own degrees are consistent. Among those who have at least one parent with a university degree, 19.9% of them complete their studies in the same field of study as one of their parents. However, this share rises to 34.6% among single-cycle second-level graduates, it is within the degrees that most frequently lead to the self-employment (38.3% among graduates in law and 37.5% in health and pharmacy).

Graduates with a high social background (i.e. those whose parents are entrepreneurs, self-employed and managers) accounted for 22.3% in 2021 (20.4% among first-level graduates, 22.0% among two-year masters and 32.4% among single-cycle second-level graduates). By contrast, graduates with less-favoured social backgrounds (i.e. those whose parents perform executive jobs: blue-collars and executives) account for 22.1% (23.8% among first-level graduates, 21.1% among two-year masters, only 15.9% among single-cycle second-level graduates).

Although schematic, these data highlight the weight of social origin on choices and on the possibility of successfully completing a course of study. Enrolment in single-cycle courses inevitably entails a higher level of investment than in 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. 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. In addition, 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

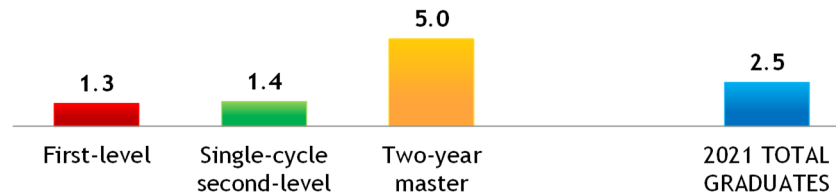
2.1. Geographic origin

In 2021, nearly half of all graduates (44.3%) earned their degree in the same province in which they obtained their high school/secondary school diploma, and another 25.8% moved to a neighbouring province. It therefore follows that 70.1% of the graduates studied at most in the province neighbouring the one where they got their secondary-school diploma. This phenomenon, which involves 74.6% of first-level graduates and 72.9% of second-level graduates, is less pronounced among two-year masters (61.1%). The choice of studying nearby one's place can also be explained as by the wide spread of university campuses,⁹ as by the need of less favoured families to contain the costs of education. 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 29.9%) and that the geographical distribution of the place where the high school/secondary school diploma was earned plays a significant role in this phenomenon. In fact, mobility for study purposes has a very clear direction, which tends to be from the South or the Islands (the term "South" will be hereinafter used to include the Islands) to the Centre and North of Italy. 28.0% of graduates who obtained their degree in the South chose a university in a different geographic area, compared with 13.2% of those who obtained their degree in the Centre and 3.3% of those who obtained their degree in the North.

In 2021, 12,486 citizens from other countries graduated from one of the universities part of AlmaLaurea Consortium. Foreigners here account for 4.2% of the total number of graduates, and also they are slightly increasing (2.8% in 2011). However, these are mostly young people belonging to immigrant families but living in Italy where 40.2% of graduates with non-Italian citizenship have obtained a high school/secondary school diploma in our country (28.2% in 2011). 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 (-3.3 percentage points). By taking into consideration the share of foreign citizens with a foreign diploma, probably the segment of the population that thus moved to Italy at the time of the university choice, the value among the 2021 graduates is 2.5%. Such a percentage almost remains unchanged in recent years. The value rises to 5.0% among two-year masters and decreases to 1.4% among single-cycle second-level graduates and 1.3% among first-level graduates (Figure 2).

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

Figure 2 - 2021 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 (45.3%) comes from Europe (in particular from Romania and Albania, 11.4% and 9.1% respectively), among foreign graduates who graduated abroad the share of those from Europe falls (29.9%) and the most represented country is China, with 12.8%. Foreign graduates with high school/secondary school diplomas abroad are more represented in specific fields of study such as architecture and construction (5.8%); information and communication technologies (4.5%); on the other hand, in three fields of study (law, education, sports sciences and physical education) less than 1.0% of foreign graduates obtained their diplomas abroad.

2.2. Educational background

As for the educational background of graduates in 2021, a prevalence of high school diplomas (74.8%) is found, in particular for scientific high school diplomas (awarded by 40.4% of graduates) and high school diplomas in classical studies (13.7%). This is followed by technical secondary school diplomas (19.7%) while vocational diplomas are marginal (2.6%).

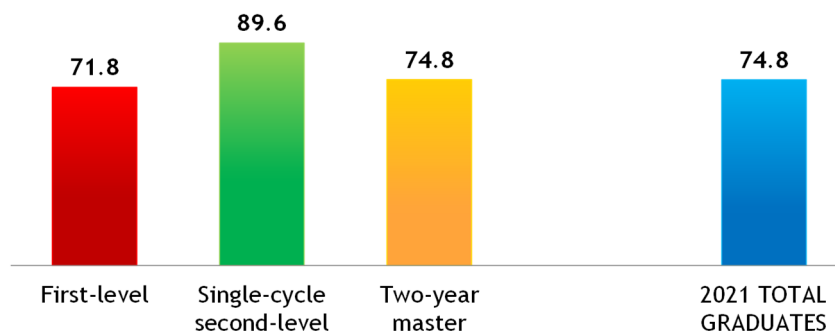
The share of graduates with a high school diploma has increased over the last ten years, rising from 70.1% in 2011 to 74.8% in 2021 (+4.7 percentage points), particularly at the expense of graduates with a technical diploma, which fell from 24.9% to 19.7%. In recent years, however, the trend has been reversing, with a slight decline in high school graduates and a slight upturn in technical and vocational graduates. This trend could also be linked to 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 want to enrol in university.

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, 89.6% have in fact a high school education mainly in scientific (48.5%) or classical studies (27.4%), compared to 71.8% of first-level

¹⁰ The first-level graduates of 2021 include the first graduates in vocational degree programmes, which were launched in the 2018/2019 academic year. However, it was only a very small number (112 graduates), so it is not possible to make any kind of analysis.

graduates (from high school in scientific and classical studies, 37.1% and 10.7% respectively) and 74.8% of two-year masters (from high school in scientific and classical studies, 43.4% and 14.2% respectively).

Figure 3 - 2021 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 diploma obtained and the field of university studies, which shows a certain stability over time. If 37.1% 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 (67.9%) and natural sciences, mathematics, physics and statistics (58.9%). Conversely, graduates with a high school diploma in scientific studies are fewer among graduates from education (11.7%) and foreign languages (13.7%). Among first-level graduates, those with a high school diploma in classical studies (10.7% overall) are more common in humanities and literature (36.5%) and psychology (18.3%), while they represent a decidedly smaller share of first-level graduates in information and communication technologies and sports sciences and physical education (3.2% and 4.5% 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 (26.6% overall) vary appreciably depending on the course of study: the percentage is relatively higher in information and communication technologies (53.0%), agriculture and forestry (44.5%), economics (41.5%), law (41.2%), while it is weaker in humanities and literature (9.7%), psychology (11.3%), arts and design (17.6%) and natural sciences, mathematics, physics and statistics (18.0%).

As previously mentioned, 48.5% of single-cycle second-level graduates came from high school in scientific studies; this percentage is over 60% among graduates in health and pharmacy (63.6%) and those in veterinary (63.0%). 27.4% of single-cycle second-level graduates come from high school in classical studies: this percentage rises to 40.8% among graduates in law, while it is limited to 13.3% among graduates from architecture and construction and 13.6% among graduates in education. Compared to the average for single-cycle second-level graduates (8.8%), the share of graduates with a technical or vocational qualification is higher among graduates from architecture and construction (15.1%), education (12.5%) and law (12.2%). This percentage is negligible among graduates in health and pharmacy (4.4%).

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 (74.8%) 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 82.4 out of 100, compared to 80.9 for first-level graduates. This result, verified in all 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 2021 first-level graduates were higher for graduates in engineering and engineering trades (86.2) and graduates in natural sciences, mathematics, physics and statistics (84.0), both with a high presence of scientific high school graduates, but also humanities and literature (83.9) and foreign languages (83.5), 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 in sports sciences and physical education (74.0), education (75.9), law (77.5) and politics, social sciences and communications (78.0).

Graduation marks are even higher among single-cycle second-level graduates who obtained an average of 84.3 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

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 a total of 9.5% of 2021 graduates. First-level graduates tend to studying abroad less frequently (6.8%) than two-year masters (12.0%) and single-cycle second-level graduates (15.3%).

The percentage 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. While graduates' answers refer to the entire study period, the decrease shown among 2021 graduates is most likely attributable to the pandemic, during which study abroad experiences came to a standstill due to the severe travel restrictions. More specifically, among the 2021 graduates, 7.1% of study experiences abroad were gained as part of European Union programmes (Erasmus in the first place), 1.4% as a result of other experiences recognised by the course of study (Overseas, dissertations abroad, etc.) and the remaining 0.9% as a personal initiative.

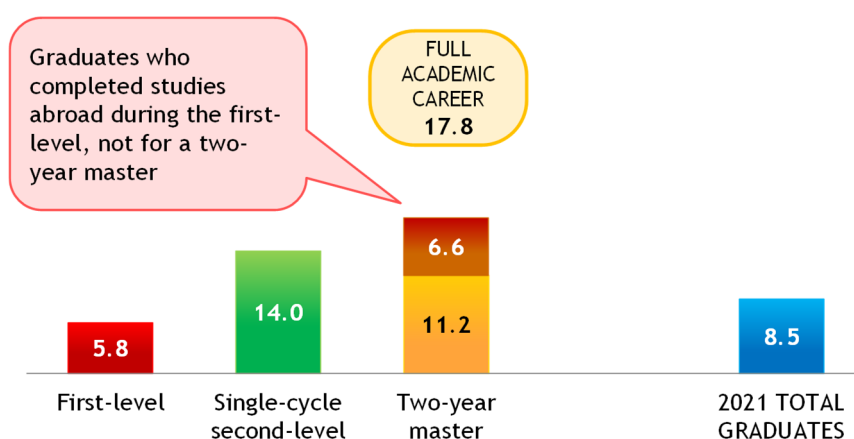
Combining study experience promoted by European Union programmes and other programmes recognised by the course shows that 8.5% of all graduates have gained this type of experience (Figure 4). This share had slightly increased until 2020, from 8.9% in 2011 to 11.3%, but in 2021 it returned to lower levels than in 2011.

Among the 2021 first-level graduates, this percentage is 5.8%, with a particularly marked peak in foreign language (20.0%) and above average values in politics, social sciences and communications (9.0%) and economics (7.7%).

Among single-cycle second-level graduates, study experience abroad recognised by the degree course is relatively more widespread, accounting for 14.0% of graduates. Study abroad was particularly high for architecture and construction (24.3%), veterinary (15.5%) and law (14.8%).

Two-year masters who benefited from studying abroad as part of initiatives recognised by the course of study account for 11.2%. A further share of graduates who joined study abroad programmes during their first-level course of study is added for a total of 17.8% within the "3+2" years of study. The latter value shows a decrease compared to 2020 (it was 21.0%), bringing Italy below the European target of 20% for 2020. As was to be expected, study abroad during two-year master studies were particularly strong for graduates in foreign languages (20.9%), but also in architecture and construction (14.3%) and engineering and engineering trades (14.2%). The pandemic particularly affected two-year masters' courses of study, among which the programme-recognised study experience decreased compared to 2020 graduates by 4.1 percentage points, while the decline was smaller among first-level and single-cycle second-level courses of study (-2.4 and -2.3 points respectively). This result is inevitably linked to the duration of each programme: it is worth remembering that the two-year masters went through most of their experience at the height of the pandemic.

Figure 4 - 2021 graduates: study abroad recognised by the course of study by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

All things being equal, those who studied abroad are more likely to be employed than those who have not, whether the experience was recognised by their course of study (+15.4%) or related to personal initiative (+11.8%).

Among graduates whose study abroad are recognised by their course of study, 84.8% took at least one exam that was validated on their return to Italy. 20.0% of those who studied abroad also prepared a sizeable part of their thesis at that same place (such figure rises to 33.6% among two-year masters). Compared to 2020, for the reasons already mentioned, this share fell sharply across all courses of study, particularly among two-year masters (-6.7 percentage points). These are experiences which not only enrich one's personal background, but also allow one to acquire greater linguistic skills. In fact, 90.2% 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.¹¹ Conversely, this share is 59.3% among those who had not such an experience.

3.2. Curricular internships

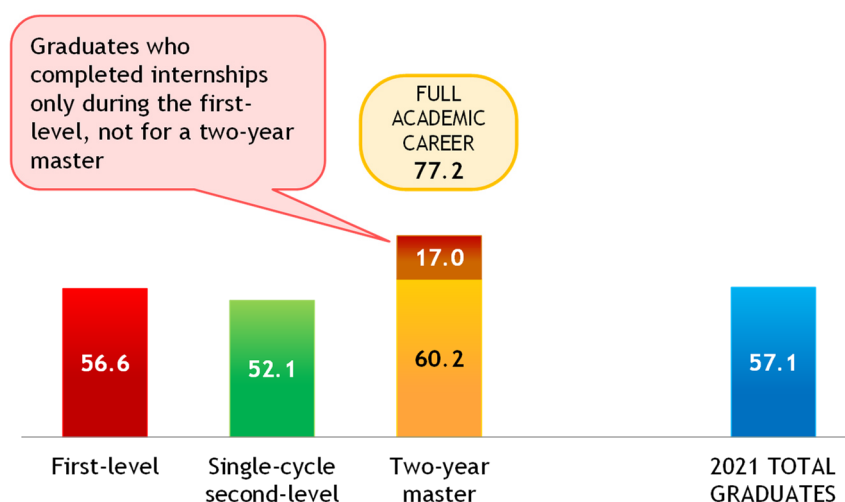
Curricular internships carried out and recognised by the course of study represent for Italian Universities one of the strategic goals in terms of understanding and collaboration between universities and the economic system. For years, as shown by the in-depth studies carried out by AlmaLaurea, these experiences have represented a trump card for students to play on the labour market. Indeed, those who had a curricular internship are, *ceteris paribus*, 7.6% more likely to be employed one year after obtaining their degree than those who have not carried out this type of activity.

In 2021, 57.1% of graduates had a curricular internship (Figure 5). In 2011 they involved 55.3% of graduates, and after a few years of substantial stability, there was a steady increase (bringing this share to 59.9%), which was followed by a contraction in 2020 (-2.3 percentage points compared to 2019) and 2021 (-0.5 points compared to 2020). However, these trends do not hold for single-cycle second-level graduates, who instead enjoyed a slight increase in curricular internships as seen in recent years, driven in particular by health students. Going into more detail, 34.0% of graduates had their curricular internship in a non-university setting, 13.2% in a university setting and 9.1% had a job that was then recognised by their course of study. Over the past year there was a decrease in experiences outside the university (-1.8 percentage points) and a simultaneous increase in those within the university (+1.5 points). Those who experienced a curricular internship show a high level of satisfaction: 67.0% of graduates expressed a decidedly positive opinion.

More specifically, the internship recognised by the course of study involved 56.6% of first-level graduates. In particular 34.9% 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 (90.6%), health (89.4%), agriculture and forestry (80.0%). The minority of graduates in engineering and engineering trades (27.2%) and humanities and literature (28.4%) are instead involved in internships. Among first-level graduates, curricular internships are more widespread (65.7%) as for those who do not intend to continue their studies with a two-year master.

¹¹ See sect. 5.1 for the level of language knowledge.

Figure 5 - 2021 graduates: internships recognised by the course of study by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

Curricular internships are also frequent among two-year master's degree graduates, reaching 60.2%. Furthermore, 17.0% of two-year masters had an internship even if only during their first-level course of study, which brings the total number of two-year masters with internship experience as part of their training to 77.2%. Graduates in sports sciences and physical education (86.3%), health (84.0%) and education (79.1%) are more committed to these activities, while those from humanities and literature (38.4%) and information and communication technologies (51.0%) are less so.

With reference to single-cycle second-level courses of study, curricular internships involved 52.1% of graduates, although the situations differ widely according to the field of study. As many as 85.1% of graduates in education engaged in these activities compared to 19.7% of those in law.

3.3. Working while studying

Over the last ten years, the proportion of graduates working while studying has declined from 72.9% in 2011 to 64.2% in 2021. Such a decline is more marked in the years immediately following the economic crisis and it has been followed by a stable trend since 2015. The decline is therefore probably the combined effect of a number of factors: the economic crisis and, more recently, the Covid-19 pandemic (which particularly affected the decrease in occasional experiences during studies), but also the gradual reduction in the proportion of the adult population enrolled at the university. More specifically, in 2021 7.2% of graduates are studying workers, i.e. they graduated by working permanently during their studies.¹²

Working students, i.e. all the other graduates who have had working experience during their university studies, account for 59.2%. Similarly, the incidence of graduates without any type of working experience has increased over the last ten years reaching 35.6% in 2021 (+9.0 percentage points compared to graduates in 2011).

¹² 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.

Any kind of working experience while studying represents 64.9% of first-level graduates; 6.5% are studying workers. Graduates who have had work experience are more frequent in sports sciences and physical education (80.4%), education (80.1%), law (78.8%), agriculture and forestry (73.7%) and politics, social sciences and communications (73.6%). This type of experience is less frequent in engineering and engineering trades, health, information and communication technologies (54.2%, 54.7%, 56.4% and 59.3% respectively). Except for information and communication technologies, these last groups show a very low percentage of studying workers (between 2.6% and 3.5%), which are more predominant in law (26.4%), education (15.8%), politics, social sciences and communications (10.5%) and sports sciences and physical education (10.0%).

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 (56.2%) are involved in working activities, ranging from 79.3% of graduates in education to 43.7% of graduates in health and pharmacy. However, it is true that only 4.3% of new single-cycle second-level graduates are actually studying workers.

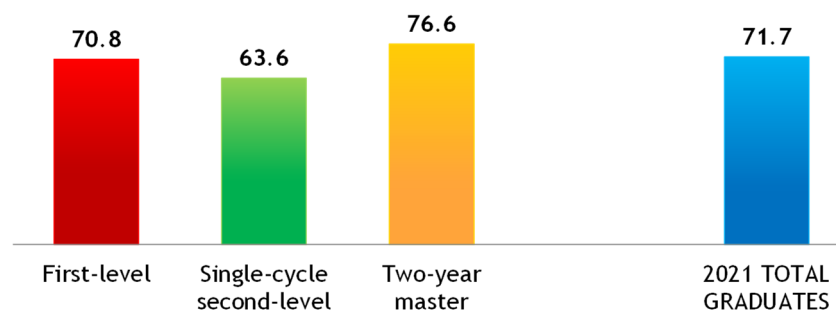
65.7% of two-year masters worked during their studies. The share of studying workers still remains low (9.2%), although it reaches far from negligible levels among graduates in health (33.9%) and education (28.8%).

4. Study circumstances

4.1. Lectures attendance

In 2021, 71.7% of graduates regularly attended lectures for at least 3/4 of the subjects scheduled: 70.8% for first-level graduates, 63.6% for single-cycle second-level graduates and 76.6% for two-year masters (Figure 6). Note that this count includes lessons attended remotely, particularly those held during the pandemic. Lectures attendance has been slowly but steadily increasing in the last few years: in 2011 67.6% of all graduates attended regularly lectures.

Figure 6 - 2021 graduates: regular attendance of at least 75% of lectures by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

As previously mentioned, 70.8% of first-level graduates regularly attended lectures; this dimension of the university experience also shows strong differences according to the field of study. Particularly

assiduous was the attendance at lectures in health (90.7%), architecture and construction (84.0%), engineering and engineering trades (80.3%) and natural sciences, mathematics, physics and statistics (77.5%). Conversely, lectures attendance was relatively lower among graduates from education (49.8%), law (57.5%) and psychology (57.7%).

Altogether, single-cycle second-level graduates report regular attendance at lectures in 63.6% of cases. However, this is the result of strongly differentiated situations by field of study: among architecture and construction students, attendance was decidedly broad and widespread (90.3%), while graduates in law, who make up 31.8% of the total number of single-cycle second-level degree courses, attend relatively few lectures (only 41.7% attend classes regularly). Graduates in education also attend classes less frequently (56.7%).

During the experience of two-year masters, there were particularly high levels of attendance at lectures (76.6%). Attendance varies appreciably according to the field of study, from the highest in architecture and construction (88.8%), engineering and engineering trades (84.4%) and natural sciences, mathematics, physics and statistics (82.0%) to the lowest in education (46.5%).

4.2. Scholarships and other student support services

Among graduates in 2021, besides scholarships (25.3%) the services used at least once and provided by the right to education body were canteens/foodservice (31.4%), book loans (28.9%), transport subsidies (19.5%), aid for international mobility (14.1%), vouchers for the purchase of computer equipment and books (9.4% and 9.3% respectively), contribution for rent (7.9%), healthcare (7.9%), part-time work (7.5%), services for students with disabilities (4.1%) 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 91.5% for the loan of books. However, there are critical areas including rent subsidies (61.9% satisfied) and vouchers for the purchase of books (62.9%).

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%, 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 (+2.2 percentage points compared to 2011). Over the same period, graduate satisfaction with both the timing of scholarship disbursement and the adequacy of the amount increased significantly (+16.7 and +16.6 percentage points respectively). Scholarships are less frequent among single-cycle second-level graduates (19.5%), due to their more favourable socio-economic background. Also, the use of scholarships is differentiated by field of study and is more common where students from less favoured socio-economic backgrounds is higher, particularly in foreign languages (32.2%), education (30.0%) and information and communication technologies (29.2%). 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. Foreign languages and IT skills

5.1. Foreign languages 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.¹³ 58.0% self-assessed their knowledge of written English with an "at least B2" level, while the knowledge of other languages is much lower. In fact, in terms of written skills with an "at least B2" level, 11.0% know Spanish, 7.9% French and 3.0% 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 towards an increase in English language skills.

Therefore, by focusing on the English language, written knowledge (at least at B2 level) concerns 51.9% of first-level graduates, 58.2% of single-cycle second-level graduates and 69.1% of two-year master's degree graduates. This result is probably influenced by the higher proportion of two-year masters taught 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 a level "at least B2" is particularly high, for clear reasons, in foreign languages (90.0%), followed by engineering and engineering trades (61.3%) and information and communication technologies (59.8%). On the other hand, it is much more limited among graduates from education (20.6%) and sports sciences and physical education (28.4%). Among single-cycle second-level graduates, English written proficiency is particularly high among graduates in education (83.0%), while they are significantly lower than average in architecture and construction and law (43.6% and 46.8% respectively). For two-year masters, English knowledge at least at B2 level relates to almost all graduates in foreign languages (94.0%), but also shows high levels among graduates in information and communication technologies (86.4%) and engineering and engineering trades (79.7%); values below 40% are recorded in health (37.6%) and education (37.7%).

5.2. IT skills

The level of knowledge of IT tools is another important indicator of the degree of competence 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 tool: knowledge is "at least good" for 88.9% of 2021 graduates. This is followed, in decreasing order of knowledge, by word processor (73.0%), operating systems (70.9%), presentation tools (67.0%) and spreadsheets (60.5%). The least known include programming languages (15.1%), assisted design (13.1%), databases (12.6%), data transmission networks (11.1%) and website creation (10.5%). Compared to first-level and single-cycle second-level course of study, two-year masters are distinguished by a greater knowledge of all IT tools. With respect to the differences among fields of study, the possession of the first five tools mentioned above tends to be cross-cutting among them, even if they are more familiar to graduates in information

¹³ 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 individual knowledge levels see www.europa.eu/europass/system/files/2020-05/CEFR%20self-assessment%20grid%20EN.pdf.

and communication technologies (ICTs), architecture and construction as well as engineering and engineering trades. On the other hand, the less widespread tools are strongly affected by the features of each course of study. For example, assisted design is a tool known in particular by graduates in architecture and construction (98.5% of single-cycle second-level graduates), while programming languages, databases, website creation and data transmission networks are tools known in particular by graduates in information and communication technologies (among two-year masters, 91.7%, 80.8%, 65.6% and 60.0% have a level of knowledge that is "at least good" respectively).

In trend terms, the level of knowledge of IT tools is generally declining (exceptions are operating systems, +11.9 percentage points compared to 2011, and presentation tools, +1.9 percentage points compared to 2015). This is probably due to the generational evolution of the university student body, which is also inevitably reflected in IT skills. In fact, generations Y and Z, who represent almost all 2021 graduates, are characterised by increasing digital skills. However, such skills may not be fully reflected in the survey questionnaire.

6. Degree completion time

Here, the time spent obtaining a degree is analysed by taking into account several factors, such as the enrolment age, the duration prescribed by the course regulations 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, 84.2% of first-level graduates enrolled at least one year later than the usual age, which is defined by AlmaLaurea as 19. Even more regular are the single-cycle second-level courses of study (87.7%).

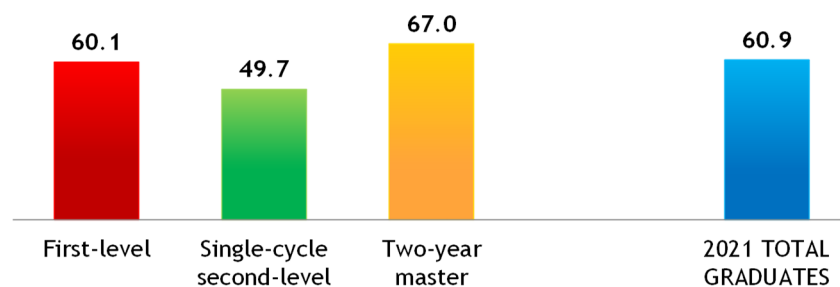
Some specific considerations concern two-year masters, who have already completed a previous university course. Here, the regularity of enrolment set by AlmaLaurea at 22 years is not particularly high (62.7%); the reason is mainly to be found in the delay accumulated during the first-level degree. In fact, almost 40% of the two-year masters completed the previous three-year course with at least one year's delay.

The age at graduation for 2021 graduates is 25.7 years, with clear differences depending on the degree type: 24.5 years for first-level graduates, 27.0 for single-cycle second-level graduates and 27.1 for two-year masters. As highlighted in previous Report on Graduates' Profile, the age at graduation has decreased significantly compared to the university system prior to the reform of Ministerial Decree no. 509/1999 and has continued to decrease (26.9 years in 2011) until 2018, to then remain more or less unchanged.

The average age at graduation among first-level graduates ranges from 23.8 years in the engineering and engineering trades to 27.4 years in law. The average age at graduation of single-cycle second-level graduates has a relatively low variation, ranging from 26.8 years in law to 27.8 years in veterinary and 27.7 in education. As noted, the average age of two-year master's graduates is 27.1 years: engineering and engineering trades (26.4 years) and economics (26.4 years), health (29.1 years) and education (28.5 years). However, this is an age in gross terms, which is also conditioned by the considerable number 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. However, in the last two years such improvement was the result of the extension of the closure of the academic year granted to students due to the Covid-19 emergency.¹⁴ While in 2011 38.9% of graduates completed their studies on time, in 2021 the percentage reached 60.9% (Figure 7). By contrast, while ten years ago 14.3% of graduates completed their course of study four or more years after their course of study schedule, today this proportion is more than halved (6.9%).

Figure 7 - 2021 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 to be consolidated and continues to affect a high proportion of first-level graduates (60.1%). As many as 72.1% of graduates in psychology complete their course of study within the three years prescribed by regulations. Conversely, 39.8% of graduates in architecture and construction manage to graduate on time.

As for single-cycle second-level graduates, 49.7% 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 (77.8% and 52.6% respectively). On the other hand, only 24.1% of graduates in architecture and construction and 37.3% in veterinary are regular.

Compared to first-level graduates, there is even greater degree completion time for two-year masters, where 67.0% of graduates complete their course with peaks of over 75% for graduates in sports sciences and physical education (82.3%), health (79.9%), agriculture-forestry (76.8%) and economics (76.7%). 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 43.4%, 55.8%, 58.5% and 58.9% respectively).

6.1. 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

¹⁴ Recall that due to the Covid-19 pandemic, article 101, paragraph 1 of Italian Decree-Law no. 18 of 17 March 2020 and the subsequent Italian Law no. 21 of 26 February 2021 extended the end of the academic year to 15 June. For 2021 graduates (as for 2020 graduates) the date considered for the conclusion of the academic year was therefore June 15 and not April 30 as it happened for graduates of the years prior to 2020.

prescribed duration of the degree programme. This index allows the delay to be measured regardless of its duration. Thus, it is equal to 0 for those who are completely on time and it increases in proportion to the accumulated delay. By contrast, this index turns negative for those whose degree completion time is shorter than the usual duration. First-level graduates have a delay index of 0.40, which means that it takes them on average 40% longer to complete their degree than the prescribed duration of the course; single-cycle second-level graduates take 30% longer (delay index equal to 0.30), while two-year masters take 40% longer than the prescribed two-year period (0.40).

The analysis took into account the following factors: high school/secondary school diploma mark, field of study, geographic mobility for study purposes, lectures attendance, scholarship and work while studying.¹⁵

The most remarkable factor in determining the delay accumulated by graduates is the field of study (Table 1): compared to graduates in sports sciences and physical education, graduates in architecture and construction take 48.5% 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 almost 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 30.0% longer to obtain a degree compared to those who scored top marks at high school/secondary school. Another very relevant factor relates to the way students approach university courses: compared to a graduate who attends lecturers regularly (more than 75% of the courses of study), those who attend less than 25% of lectures accumulate 32.8% more delay than the usual duration. Similar effects can be observed for studying workers, for whom the accumulated delay is 46.1% more than for those who never worked during their studies. Compared to those who had access to a scholarship, those who did not receive one accumulate a delay of 11.3% more. There are also significant differences with regard to 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) 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 10.0% 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 South, take 21.2% longer. As mentioned before, gender and socio-cultural origin were not included in the model because of their weak informative 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.

¹⁵ The model does not consider pre-Reform D.M. no. 509/1999 graduates. Delayed enrolment in the course of study was taken into account, but was not significant. Gender, citizenship, parents' educational qualification, social status, type of high school/secondary school diploma, 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 and average provincial score of the 2021 Invalsi tests 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.

Table 1 - 2021 graduates: linear regression model for the assessment of the delay index

	b	S.E.
High school/secondary school diploma mark (average, out of 100)	-0.007	0.000
Field of study (Sports sciences and physical education=0)		
Education ***	0.000	0.009
Arts and design	0.251	0.010
Humanities and literature	0.312	0.009
Foreign languages	0.256	0.009
Politics, social sciences and communications	0.130	0.008
Psychology	0.105	0.009
Economics	0.135	0.008
Law	0.186	0.009
Natural sciences, mathematics, physics and statistics	0.279	0.008
Information and communication technologies (ICTs)	0.346	0.012
Architecture and construction	0.485	0.010
Engineering and engineering trades	0.352	0.008
Agriculture, forestry and veterinary	0.233	0.010
Health and pharmacy	0.133	0.008
Geographic mobility for study (secondary school diploma in the North and degree in the North=0)		
secondary school diploma abroad and degree in Italy	0.169	0.025
secondary school diploma in the South and degree in the Centre	0.178	0.006
secondary school diploma in the South and degree in the North	0.118	0.005
secondary school diploma in the South and degree in the South	0.212	0.003
secondary school diploma in the Centre and degree in the South	0.113	0.016
secondary school diploma in the Centre and degree in the North	0.022	0.008
secondary school diploma in the Centre and degree in the Centre	0.100	0.003
secondary school diploma in the North and degree in another geographic area ***	-0.014	0.010
Attended classes on a regular basis (more than 75% of prescribed classes=0)		
less than 25%	0.328	0.006
25% to 50%	0.218	0.005
50% to 75%	0.125	0.003
Took advantage of scholarships (yes=0)		
no	0.113	0.003
Work during studies (no work experience=0)		
studying workers	0.461	0.005
working students	0.115	0.002
Constant	-0.004	0.008

Note: R-squared = 0.127 (adjusted R-squared = 0.127), N = 270,060

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

Source: AlmaLaurea, Graduates' Profile Survey.

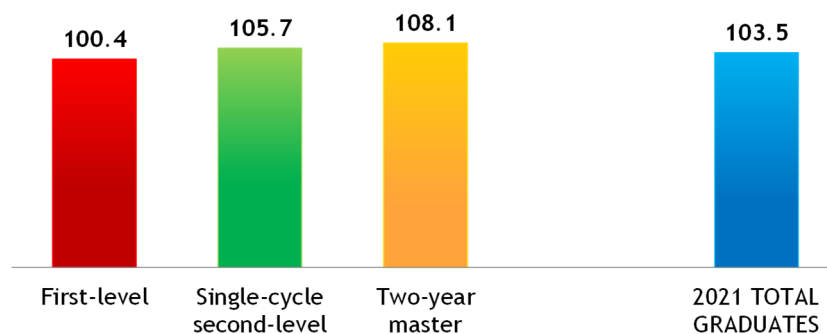
7. Graduation mark

The average graduation mark recorded among graduates in 2021 is quite similar to that of ten years ago (103.5 out of 110 in 2021, it was 102.9 out of 110 in 2011), but this is the result of a slight and steady increase over the last five years, after an initial downward trend. Among 2021 graduates, there are appreciable differences by degree type: 100.4 among first-level graduates, 105.7 among single-cycle second-level graduates and 108.1 among two-year masters (Figure 8).

While the average mark for first-level courses is 100.4, there is a certain heterogeneity among disciplines, with final marks ranging from 96.8 for economics to 97.2 for engineering and engineering trades, to 104.9 for humanities and literature, to 105.1 for health. The average graduation mark for single-cycle second-level course of study, 105.7 out of 110, shows a smaller range of variation, from

102.5 among graduates in law to 107.5 among graduates in architecture and construction. 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 7.5 points out of 110 compared to the degree obtained in the first level. The two-year masters fields of study in which the relatively lowest average graduation marks are observed are engineering and engineering trades and economics (106.7 and 106.8 respectively).

Figure 8 - 2021 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.

7.1. Graduation mark insight. Results of a linear regression model

To analyse the determinants of graduation mark, a linear regression model¹⁶ was applied (Table 2). The analysis took into account the following factors: type of high school/secondary school diploma, high school/secondary school marks, provincial average score on the Invalsi 2021 Italian tests, degree type, field of study, geographic mobility for study reasons, cultural reasons for the choice of the degree programme, lectures attendance and work during studies. Such model proves strong differences by degree type. All other things being equal, compared to a first-level degree, it is estimated that a single-cycle second-level degree achieves 2.0 points more and a two-year master's degree almost 8 points more. A 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 7.4 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 almost 11 points higher than a high school/secondary school graduate who has obtained the minimum diploma mark. This is, 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. A graduate with a high school diploma obtains, *ceteris paribus*, more points while a graduate with a technical secondary school diploma

¹⁶ The model does not consider pre-Reform D.M. no. 509/1999 graduates. Gender and social status factors were taken into account but were not found to be significant. The following factors were excluded from the model in view of their poor contribution: gender, parents' qualification, citizenship, size of the university, delayed enrolment in the degree programme, professional motivation in enrolling at university, previous university experience, distance between housing and the place of study, renting housing during studies, receiving a scholarship and doing internships recognised by the course of study.

obtains (+4 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 has a certain impact: those who attend more than 75% of lectures have a graduation mark higher (almost +3 points) than a graduate who attends less than a quarter of lectures. A similar effect came into light from the estimates made: those who do not work while studying score more than +2 points than a working student, i.e. those who work continuously and full-time. In general, graduates from central and southern universities earn 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 2.0 points higher and those who completed their high school/secondary school and university studies in the South scored 3.2 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. Finally, those who state that they enrolled in the course because of strong cultural reasons end their university experience with 1.5 votes more than those who considered this reason less important.

Once again, as in the model on degree completion time, socio-cultural background of origin was not included in the model because of its weak informative contribution: probably the effect of this factor is partly absorbed by school performance (high school/secondary school mark) and partly by the choice of the field of study.

Table 2 - 2021 graduates: linear regression model for the assessment of graduation mark

	b	S.E.
Diploma (vocational=0)		
high school	4.063	0.078
technical	1.939	0.082
High school/secondary school diploma mark (average, out of 100)		
Average provincial score on the Invalsi test in Italian	0.096	0.002
Degree type (First-level=0)		
Single-cycle second-level	2.017	0.052
Two-year master	7.941	0.028
Field of study (Engineering and engineering trades=0)		
Health and pharmacy	7.428	0.054
Arts and design	7.009	0.078
Education	6.680	0.068
Humanities and literature	6.243	0.065
Sports sciences and physical education	5.644	0.091
Agriculture, forestry and veterinary	5.107	0.083
Politics, social sciences and communications	4.757	0.056
Foreign languages	4.203	0.059
Psychology	4.280	0.068
Law	4.124	0.081
Architecture and construction	3.824	0.074
Natural sciences, mathematics, physics and statistics	3.505	0.052
Information and communication technologies (ICTs)	3.109	0.103
Economics	2.107	0.049
Geographic mobility for study (secondary school diploma in the South and degree in the North=0)		
secondary school diploma abroad and degree in Italy	-2.104	0.285
secondary school diploma in the South and degree in the Centre	1.954	0.075
secondary school diploma in the South and degree in the South	3.242	0.054
secondary school diploma in the Centre and degree in the South	3.176	0.183
secondary school diploma in the Centre and degree in the North	1.472	0.100
secondary school diploma in the Centre and degree in the Centre	3.222	0.063
secondary school diploma in the North and degree in another geographic area	3.114	0.128
secondary school diploma in the North and degree in the North	0.879	0.074
Relevance of cultural reasons for the choice of degree programme (not definitely yes=0)		
definitely yes	1.479	0.029
Attended classes on a regular basis (less than 25% of prescribed classes=0)		
25% to 50%	0.224	0.079
50% to 75%	0.547	0.069
more than 75%	2.624	0.065
Work during studies (studying workers=0)		
working students	1.438	0.052
no work experience	2.149	0.055
Constant	78.321	0.131

Note: R-squared = 0.438 (adjusted R-squared = 0.438), N = 265,938

Source: AlmaLaurea, Graduates' Profile Survey.

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, highlights 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 doubts about the ability of the graduation mark to accurately measure the level of graduates' skills.

8. 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 a part of the completed university experience, seems not to have influenced graduates' evaluations (which are confirmed to be increasing 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 (-5.3 percentage points), equipment for learning such as labs and practical work (-4.5), library services (-4.7) and individual study spaces (-3.3) during the course of study decreased significantly. 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. In 2021, 27.2% of graduates said they were definitely satisfied with their relations with the lecturers while a further 61.6% were fairly satisfied (on the evaluation scale used in the questionnaire this corresponds to "more yes than no"). That results in an overall satisfaction rate equal to 88.8%. As for the evaluation of classrooms attended by 97.6% of graduates, 30.8% rated them "always or almost always appropriate" and a further 50.1% "often appropriate". Library services (i. e. loan/consultation and opening hours), used by 79.1% of graduates, were evaluated as "definitely positive" by 40.9% of users and "quite positive" by another 52.4%. Computer workstations, used by 66.2% of new graduates, are rated as "available in an appropriate number" by 57.8% of users. Individual study areas were used by 76.3% of students and 62.7% considered them "appropriate". As for the rating of the equipment for teaching purposes, (i.e. workshops and practical activities) among those who used them (75.1%), 30.3% considered them "always or almost always appropriate". If 47.2% of those who considered them "often appropriate" are added, the overall satisfaction is 77.5%.

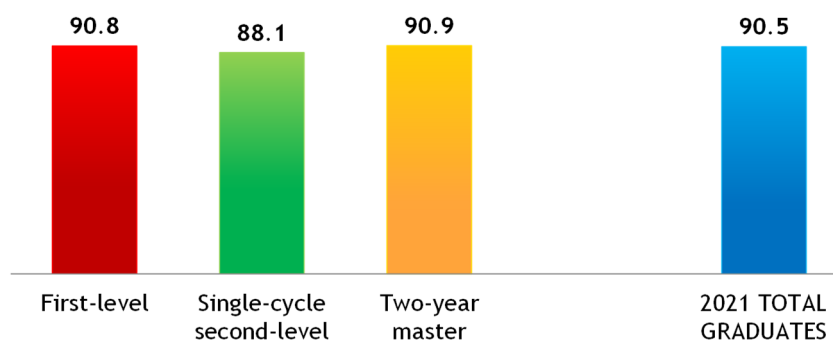
Among the other services offered by the university, 2021 graduates say they made extensive use of the student administrative offices (94.1%), distantly followed by post-graduate study orientation services (59.7%), job orientation training initiatives (56.0%), the job placement service (55.7%) and finally job search support services (52.7%). The users of these services were not particularly satisfied (the rating scale used in the questionnaire considers the sum of "definitely yes" and "more yes than no"): 66.4% for the job placement service, 65.9% for post-graduate study guidance, 63.9% for the student administration offices, 61.9% for work guidance training initiatives and finally 57.7% for job search support.

Exams administration (including exams session, timetables, information, bookings) was judged as "always or almost always" appropriate by 38.3% of graduates, with a further 47.3% defining it as appropriate "for more than half of the exams". Hence, the overall level of satisfaction was equal to 85.6%. Furthermore, 84.4% of the graduates felt that the overall study load was appropriate with respect to the duration of the course of study: 42.6% felt it was definitely appropriate, 41.8% fairly appropriate (on the rating scale used in the questionnaire this corresponds to "more yes than no").

The analysis of the trend in ratings over time shows a tendency to grow both in the evaluation of relations with teachers and in the evaluations expressed with respect to the organisation of tests and the adequacy of the study load. Ratings for facilities and equipment also tended to increase despite their lower use.

The overall satisfaction with the course of study is an element that sums up the various aspects of the university experience, where 43.0% of graduates were decidedly satisfied and another 47.5% are fairly satisfied, for an overall incidence of 90.5% (Figure 9). This proportion has been increasing in recent years (i.e. in 2011 it was 87.1%).

Figure 9 - 2021 graduates: overall satisfaction of the course of study by degree type (percentage values)



Note: the percentage of satisfaction includes both rates: "yes definitely" as "rather yes than no".

Source: AlmaLaurea, Graduates' Profile Survey.

By looking at the degree type, satisfaction with university experience is high and consolidated over time among first-level graduates: 41.2% of graduates say they are definitely satisfied, 49.6% are fairly satisfied, for an overall satisfaction of 90.8%. The most satisfied are first-level graduates from education (94.3%), psychology (92.7%), law (92.4%), as well as natural sciences, mathematics, physics and statistics (92.3%). Despite the gap is generally small, graduates in foreign languages (86.3%), sports sciences and physical education (88.1%).

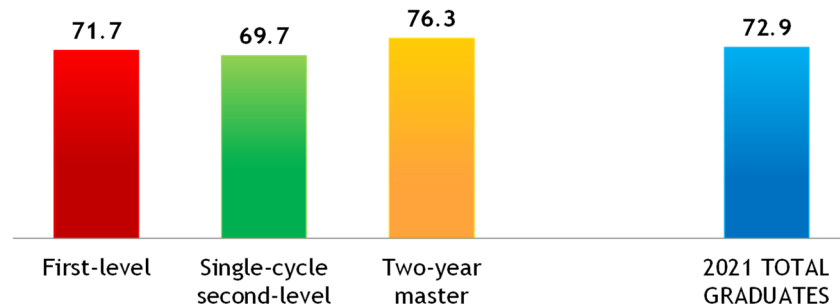
Among single-cycle second-level graduates, 39.9% said they were definitely satisfied with their university experience and 48.2% were fairly satisfied, for an overall satisfaction of 88.1%. Particularly satisfied are graduates in education (94.6%) while graduates in health and pharmacy (84.9%) and architecture and construction (85.6%) are more critical.

47.3% of two-year masters are definitely satisfied with their course of study with a further 43.6% being fairly satisfied. The overall level of satisfaction with the latest university experience is therefore 90.9%. The most satisfied are graduates in humanities and literature (93.0%), education (92.6%), information and communication technologies (92.5%), engineering and engineering trades (92.5%), psychology (92.3%) and economics (91.9%). The most critical are graduates of sports sciences and physical education (81.3%) and health (83.8%).

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 72.9% of the entire population (Figure 10), a percentage that is higher than that of 2011 (68.9%). 8.8% of graduates would confirm the university, but would move on to another course of study,

10.4% 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 2.0% would no longer enrol at the university (as for the two-year masters, reference is made only to the final two years).

Figure 10 - 2021 graduates: chance to enrol again at university by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

Among first-level graduates, 71.7% 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; 10.2% would do vice versa, that is, the same course of study but at a different university. 5.8% would change both course of study and location and only 1.6% would no longer enrol at the university. First-level graduates of psychology and information and communication technologies agree that their experience was fully confirmed (both 78.7%). On the other hand, the percentage of those who would fully confirm their experience is lower among graduates in foreign languages (57.6%), who would often change their course of study, university or both of them.

If they could go back, 69.7% of single-cycle second-level graduates would choose their course of study and university again (from 85.3% of the graduates in education to 60.2% in architecture and construction). 17.2% would follow the same course of study at a different university. The difference with respect to first-level graduates is attributable in part 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 wherever one is admitted.

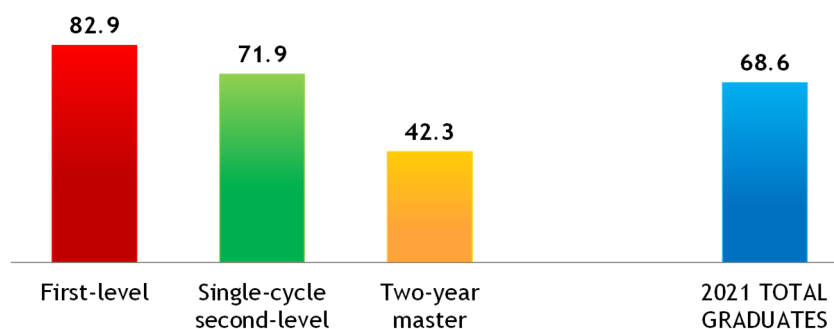
The most positive opinions expressed on various aspects by two-year masters are echoed in the high tendency to confirm the choice of course of study and the university where they graduated (two-year masters obviously refers only to the two-year course of study) according to 76.3% of graduates. Again, the situation changes depending on the field of study: from 81.8% of the graduates in humanities and literature to 69.7% in foreign languages.

9. Post-graduate study prospects

Among graduates in 2021, 68.6% intend to continue their post-graduate education (Figure 11). However, this share has been increasing over time (63.7% in 2011) and this is clearly reflected in the last few years. Specifically, attention should be paid to the significant growth seen in the last year among second-level graduates: +4.7 points between the two-year masters and +5.5 points between the single-cycle second-level graduates.

As might be expected, the trend to continue one’s studies is particularly marked among first-level graduates (82.9%), who intend to move largely towards a two-year master’s degree (65.2%), and among single-cycle second-level graduates (71.9%), for whom specialisation schools (33.8%), academic masters (11.4%) and internships/legal internships (10.9%) are the most frequently prospect. Although two-year masters are partially less likely to continue their studies (42.3%), they are strongly attracted by a PhD: 13.7%.

Figure 11 - 2021 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 (95.6%), humanities and literature (91.4%), engineering and engineering trades (90.9%) and sports sciences and physical education (90.7%). On the other hand, graduates in law (63.7%), information and communication technologies (64.2%) and education (70.5%) are partially less likely 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 65.2% of graduates: it is particularly wished for by graduates in psychology (89.0%), engineering and engineering trades (86.6%), humanities and literature (83.3%) as well as natural sciences, mathematics, physics and statistics (82.6%). In detail, 71.7% of first-level graduates intend to enrol in a two-year master's degree to complete and enrich their education. This percentage varies from 94.2% in health (where the number of those who intend to continue their education with a two-year master's degree is definitely low) to 56.0% in psychology, where, on the contrary, 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. Moreover, 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 (ranging from 75.8% in architecture and construction to 50.6% in politics, social sciences and communications). Finally, focusing on other training alternatives, 8.6% of first-level graduates intend to enrol in an academic master, a particularly attractive qualification to graduates in health (31.7%).

As mentioned above, 71.9% of single-cycle second-level graduates intend to continue their studies. Such willingness varies considerably by field of study. In fact, it is high among graduates in veterinary (82.6%, with 39.6% oriented to post-graduate specialisations) and health and pharmacy (82.1%, with 62.2% going on to post-graduate specialisation), and lower among graduates in architecture and construction (46.3%, with 14.1% heading towards an academic master and 8.8% towards a PhD), as well

as in education (47.1%, with 11.9% heading towards a specialist school and 8.7% an academic master). The share of graduates in law who intend to continue their studies is 72.4%. A relatively high share of them is likely to continue their studies with a legal internship (30.9%).

As previously highlighted, 42.3% of two-year masters intend to continue their studies. In particular, two-year masters in psychology (84.4%, with 30.5% planning an internship and 25.2% a post-graduate specialisation), health (57.9%, with 28.2% planning a master), natural sciences, mathematics, physics and statistics (57.5%, with 33.4% planning a PhD) and humanities and literature (55.0%, with 25.9% planning a PhD). Conversely, graduates from engineering and engineering trades (23.2%, of which 11.8% with a PhD), information and communication technologies (26.8%, in particular 19.3% with a PhD) and economics (28.2%, in particular 10.7% with a master's degree) are less likely to continue their studies.

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

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