

23rd Report 2020 Graduates' Profile

2021 Summary Report

Supported by



Summary of the 23rd Survey on the 2020 Graduates' Profile (2021 AlmaLaurea Report)

The analysis carried out in the following sections focuses on the characteristics of the flow of human capital leaving the Italian university system in 2020. The pandemic crisis has influenced many aspects of the university experience, even if the effects on the experiences lived and the performances achieved by the 2020 graduates have not yet had time and opportunity to fully manifest themselves. Especially in this historical phase, however, the Report is a useful tool for assessing the context of reference and developing policies oriented towards economic, social and environmental sustainability. Together with the Report on the Occupational Condition, in fact, this Report provides a contribution to the implementation of the objectives of the Next Generation EU and the National Recovery and Resilience Plan in the tertiary education sphere, as well as to the definition of a European system of graduate tracking in the medium-long term.

This 23rd report shows a composite picture: after years of a downward trend, the age at graduation has stabilised at under 26. Graduates completed their studies within prescribed degree completion time, but this year that is due to the extension of the end of the academic year granted to students because of the Covid-19 emergency. As for experiences gained during studies, curricular internships have contracted in the last year after a period of gradual increase. On the other hand, the number of study experiences abroad recognised by the course of study has tended to increase, although they are still too few in number. An increase in recent years is resulted in the intention to continue with university studies, particularly among first-level graduates and two-year masters.

The population examined is definitely heterogeneous and the profiles of graduates are quite diverse, each one characterised in terms of family, social and educational background, geographic origin and aspirations.

The Graduates' Profile examines 290,772 graduates over the 2020 calendar year. The 76 Universities involved in the survey and that represents where about 90% of Italian graduates obtain their degrees are distributed throughout the country with a certain homogeneity. That is to say 28 in the North, 22 in the Centre, 26 in the South and on the Islands. In 2020, 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: 165,356 first-level graduates (representing 56.9% of the total graduates in 2020); 35,771 single-cycle second-level graduates (12.3%); 88,548 two-year masters (30.5%); 152 in the pre-reform course of study in Primary Education Sciences (0.1%); 945 in other pre-

¹ The complete documentation is available at www.almalaurea.it/en/universita/indagini/laureati/profilo.

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/universita/indagini (Italian version).

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.

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 269,918 graduates who represent 92.8% 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 (16.2%), engineering and engineering trades (11.7%), health (11.4%) as well as natural sciences, mathematics, physics and statistics (10.5%). The single-cycle second-level courses of study (lasting at least five years) are concentrated in a few fields: health and pharmacy (45.4%), law (32.7%), education (11.8%, with only the degree class in Primary Education Sciences), architecture and construction (7.6%), veterinary (2.2%), humanities and literature (in 2020, only 71 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 (18.4%); engineering and engineering trades (14.6%); natural sciences, mathematics, physics and statistics (13.3%); politics, social sciences and communications (9.6%). 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. Furthermore, in the joint analysis by subject group and degree type, the two-year masters in law (courses activated by Ministerial Decree no. 509/1999 and in the process of being completed) and the single-cycle second-level graduates in humanities and literature (the first 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 marginal size and peculiarities.

It should be noted that the pandemic emergency phase does not seem to have influenced graduates' responses to various aspects of their university experience. As a result, such phase involved only a marginal part of the course of study completed during 2020. Specific investigations compared graduates who completed the survey questionnaire before the Covid-19 pandemic with those who completed it later on throughout the different phases of 2020 (spring lockdown, summer reopening and autumn restrictions). However, the differences in responses were fairly small.

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⁴ Pre-reform courses of study are those started prior to the reform of the Italian Ministerial Decree no. 509/1999. Such courses are only available for those who enrolled before said Ministerial Decree which, for this very reason, are about to gradually cease to exist.

1. Gender and social background

1.1. Gender

Accounting for more than half of all graduates in Italy since a long time, women represent 58.7% of all graduates in 2020. Such a share has tended to be stable over the last ten years. Women account for 66.1% of single-cycle second-level course of study, that is, +9.6 percentage points than among two-year masters (56.4%) and +7.8 points than among first-level graduates (58.3%).

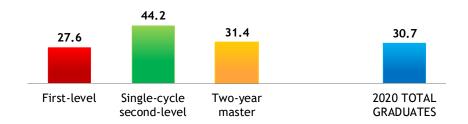
There is a strong differentiation in terms of gender composition among the various fields of study. In first-level courses women constitute a marked majority in education (92.8%), foreign languages (83.8%), psychology (81.1%) and health (74.4%). Conversely, they represent a minority in information and communication technologies (ICTs) (14.3%), engineering and engineering trades (25.9%) and sports sciences and physical education (33.4%). This distribution is nearly confirmed also within the two-year masters. In single-cycle second-level courses of study, women prevail in all fields of study: from 95.8% in education to 58.2% in architecture and construction.

1.2. Social background

As for social mobility, 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. This share is appreciably higher, namely 21.3%, among 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 21.3% 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, 30.7% of them have at least one parent with a university degree (26.5% in 2010). This share ranged from 27.6% of first-level graduates to 31.4% among two-year masters and 44.2% among single-cycle second-level graduates (Figure 1).

⁵ Elaborations based on Istat data. This age range is assumed to be the reference age for parents of graduates surveyed by Almal aurea.

Figure 1 - 2020 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, 20.1% of them complete their studies in the same field of study as one of their parents. However, this share rises to 35.5% among single-cycle second-level graduates, it is within the degrees that most frequently lead to the self-employment (39.3% among graduates in health and pharmacy and 38.7% in law).

Graduates with a high social background (i.e. those whose parents are entrepreneurs, self-employed and managers) accounted for 22.4% in 2020 (20.3% among first-level graduates, 22.1% among two-year masters and 33.3% 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 21.9% (23.9% among first-level graduates, 20.9% among two-year masters, only 15.1% 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 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.

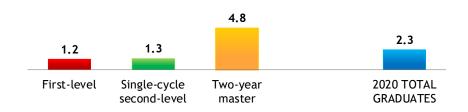
2. Geographic origin and educational background

2.1. Geographic origin

In 2020, nearly half of all graduates (44.8%) obtained their degree in the same province in which they obtained their high school/secondary school diploma. This phenomenon, which involves 47.8% of first-level graduates and 45.8% of second-level graduates, is less pronounced among two-year masters (38.6%). The choice of studying nearby one's place can also be explained as by the wide spread of university campuses, as by the need of less favoured families to contain the costs of education. However, what is confirmed is that mobility is tending to increase and that the geographic area the high school/secondary school diploma was obtained plays a pivotal role in such a context. 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. 26.6% of graduates who obtained their degree in the South chose a university in a different geographic area, compared with 11.3% of those who obtained their degree in the Centre and 2.9% of those who obtained their degree in the North.

In 2020, 11,411 citizens from other countries graduated from one of the universities part of AlmaLaurea Consortium. Foreigners here account for 3.9% of the total number of graduates, and also they are slightly increasing (2.9% in 2010). However, these are young people belonging to immigrant families but living in Italy where 41.1% of graduates with non-Italian citizenship have obtained a high school/secondary school diploma in our country (28.2% in 2011, the first year in which this information was available). 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 2020 graduates is 2.3%. Such a percentage almost remains unchanged in recent years. The value rises to 4.8% among two-year masters and decreases to 1.3% among single-cycle second-level graduates and 1.2% among first-level graduates (Figure 2).

Figure 2 - 2020 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 (48.9%) comes from Europe (in particular from Romania and Albania, 11.6% and 9.7% respectively), among

⁶ As a matter of facts, almost all Italian provinces host one or more course of study.

foreign graduates who graduated abroad the share of those from Europe falls (35.2%) and the most represented country is China, with 10.9%. Foreign graduates with high school/secondary school diplomas abroad are oriented towards specific fields of study such as architecture and construction (4.1%); information and communication technologies (4.0%); on the other hand, in three fields of study (education, law, sports sciences and physical education) less than 1.0% of foreign graduates obtained their diplomas abroad.

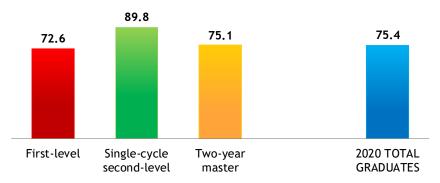
2.2. Educational background

As for the educational background of graduates in 2020, a prevalence of high school diplomas (75.4%) is found, in particular for scientific high school diplomas (awarded by 41.3% of graduates) and high school diplomas in classical studies (14.7%). This is followed by technical secondary school diplomas (19.5%) while professional diplomas are marginal (2.4%).

The share of graduates with a high school diploma has increased considerably over the last ten years, rising from 68.9% in 2010 to 75.4% in 2020 (+6.6 percentage points), particularly at the expense of graduates with a technical diploma, which fell from 25.8% to 19.5%. Besides the reform of secondary schools that came into force in the 2010/11 academic year and increased enrolment in high school, the trend in the rate of transition to university probably contributed to these results. Until the 2013/14 academic year, there was a more evident drop among students with a technical secondary school diploma. It is worth checking whether the recent introduction of professional degrees, addressed in particular to technical secondary and professional school graduates for creating profiles that can be inserted directly into the labour market, will succeed in increasing the number of these students at university. 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. These courses currently involve a limited number of students, but they have certainly been very appealing to technical secondary school and professional 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, 89.8% have in fact a high school education mainly in scientific (48.6%) or classical studies (28.6%), compared to 72.6% of first-level graduates (from high school in scientific and classical studies, 38.5% and 11.5% respectively) and 75.1% of two-year masters (from high school in scientific and classical studies, 44.0% and 15.0% respectively).

Figure 3 - 2020 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 38.5% 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 (68.7%) and natural sciences, mathematics, physics and statistics (61.1%). Conversely, graduates with a high school diploma in scientific studies are fewer among graduates from education (13.3%) and foreign languages (15.8%). Among first-level graduates, those with a high school diploma in classical studies (11.5% overall) are more common in humanities and literature (37.8%) and psychology (19.5%), while they represent a decidedly smaller share of first-level graduates in information and communication technologies (ICTs) and sports sciences and physical education (3.0% and 5.5% 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 professional diplomas (26.0% overall) vary appreciably depending on the course of study: the percentage is relatively higher in information and communication technologies (52.5%), economics (41.5%), law (41.5%), agriculture and forestry (39.7%), and lower in the humanities and literature (9.1%), psychology (11.6%), natural sciences, mathematics, physics and statistics (16.0%) and arts and design (17.4%).

As previously mentioned, 48.6% of single-cycle second-level graduates came from high school in scientific studies; this percentage is over 60% among graduates in veterinary (63.2%) and those in health and pharmacy (62.4%). 28.6% of single-cycle second-level graduates come from high school in classical studies: this percentage rises to 41.0% among graduates in law, while it is limited to 15.1% among graduates from architecture and construction and 15.6% among graduates in education. Compared to the average for single-cycle second-level graduates (9.3%), the share of graduates with a technical or professional qualification is higher among graduates from architecture and construction (14.2%), law (12.2%) and education (11.5%). This percentage is neglible among graduates in health and pharmacy (4.6%).

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 in high schools (75.1%) and technical secondary school (18.1%) 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 rate for two-year masters is 82.2 out of 100, compared to 80.7 for first-level graduates. This result

confirms that the most prepared students tend to continue their studies after a first-level degree. That is verified for all the fields of study.

The high school/secondary school diploma mark awarded by 2020 first-level graduates is appreciably lower than the average among graduates sports sciences and physical education (73.8), education (76.0), law (77.4) and politics, social sciences and communications (77.7) groups. It reaches higher levels for graduates in engineering and engineering trades (86.3) and natural sciences, mathematics, physics and statistics (83.8), where both are heavily represented by graduates from high schools in scientific studies.

Graduation marks are even higher among single-cycle second-level graduates who obtained an average of 84.2 out of 100. The reasons for these particularly brilliant results can be partly attribuited 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 the study abroad, curricular internship experiences and work during studies.

3.1. Study abroad experiences

Study abroad experiences involve a total of 12.5% of 2020 graduates. First-level graduates tend to studying abroad less frequently (9.4%) than two-year masters (16.4%) and single-cycle second-level graduates (17.8%).

The percentage of graduates who obtained a study abroad is substantially stable compared to that of 2010 (12.3% of graduates). This result, however, is due to a 2.5 percentage points increase in the number of experiences gained as part of a European Union programme, the substantial stability of other experiences abroad recognised by the study course and the simultaneous decrease in experiences gained on a personal initiative, not recognised by the course of study.

More specifically, among the 2020 graduates, 9.1% of study experiences abroad were gained as part of European Union programmes (Erasmus in the first place), 2.2% as a result of other experiences recognised by the study course (Overseas, dissertations abroad, etc.) and the remaining 1.2% as a personal initiative.

Combining study experience promoted of European Union programmes and other programmes recognised by the course shows that 11.3% of all graduates have gained this type of experience (Figure 4). This share has slightly increased over the last ten years (8.7% in 2010).

Among the 2020 first-level graduates, this percentage is 8.2%, with a particularly marked peak in foreign language (28.6%) and above-average values in politics, social sciences and communications (12.4%) and economics (10.9%).

Among single-cycle second-level graduates, study experience abroad recognised by the degree course is relatively more widespread, accounting for 16.3% of graduates. Study abroad is particularly high in architecture and construction (26.1%) and veterinary (20.1%).

Two-year masters who benefited from studying abroad as part of initiatives recognised by the course of study account for 15.3%. A further share of graduates who joined study abroad programmes

during their first-level course of study is added for a total of 21.0% within the "3+2" years of study. This figure exceeds the European target of 20% for 2020. As was to be expected, study abroad during two-year masters studies were particularly strong for graduates in foreign languages (28.6%), engineering and engineering trades (21.5%) and architecture and construction (19.0%).

FULL Graduates who ACADEMIC completed studies CAREER abroad during the first-21.0 level, not for a twoyear master 5.7 16.3 15.3 11.3 8.2 First-level Single-cycle Two-year **2020 TOTAL** second-level **GRADUATES** master

Figure 4 - 2020 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 (+14.4%) or related to personal initiative (+10.3%).

Among graduates whose study abroad are recognised by their course of study, 82.8% took at least one exam that was validated on their return to Italy. 23.4% of those who studied abroad also prepared a sizeable part of their thesis at that same place (such figure rises to 40.3% among two-year masters). These are experiences which not only enrich one's personal background, but also allow one to acquire greater linguistic skills. In fact, 89.8% of graduates who had a recognised study abroad know at least one foreign language with a self-assesment at a level equal to or higher than B2 in writing. Conversely, this share is 56.7% among those who had not such an experience.

3.2. Curricular internships

The training and orientation 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, these experiences have been representing a trump card for students to play on the labour market. Indeed, those who had a curricular internship are, *ceteris paribus*, 12.2% more likely to be employed one year after obtaining their degree than those who have not carried out this type of activity.

In 2020, 57.6% of graduates had a curricular internship. Despite accounting for 56.8% in 2010, after a few years of substantial stability, there was a steady increase (bringing this share to 59.9%) from 2015 to 2019 followed by a contraction in 2020. This result is combined with a high level of satisfaction

⁷See sect. 5.1 for the level of language knowledge.

on the part of those who have had such an experience. Indeed, 68.2% of graduates have a very positive opinion about it. In addition, 35.8% of graduates had their curricular internship in a non-university setting, 11.7% in a university setting and 9.1% had a job that was then recognised by their course of study.

More specifically, the internship recognised by the course of study involved 57.3% of first-level graduates (Figure 5); in particular 36.9% 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 (92.8%), health (88.3%), agriculture and forestry (82.1%) as well as sports sciences and physical education (80.2%). The minority of graduates in engineering and engineering trades (26.1%) and humanities and literature (28.2%) are instead involved in internships. Among first-level graduates, curricular internships are more widespread (68.7%) as for those who do not intend to continue their studies with a two-year master.

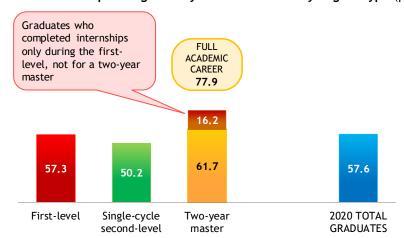


Figure 5 - 2020 graduates: internships recognised by the course of study degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Curricular internship during the two-year course are also common among two-year masters (61.7%). Furthermore, 16.2% 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 77.9%. Graduates in sports sciences and physical education (90.7%), health (85.4%) and education (79.5%) are more likley to carry out such activities.

With reference to single-cycle second-level courses of study, curricular internships involved 50.2% of graduates, although the situations differ widely according to the field of study. In fact, 85.5% of graduates in education carried out these activities while only 20.8% of graduates in law had such an experience.

3.3. Working while studying

Over the last ten years, the proportion of graduates working while studying has declined from 73.7% in 2010 to 65.2% in 2020. 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. Thus, the decrease is probably the result of both the economic crisis and the progressive reduction in the share of the adult population

enrolled in university. To be more precise, in 2020, 6.8% of graduates are working students, that is they obtained their degree by working permanently during their studies. Working students, that is to say other graduates who have had working experience during their university studies, account for 58.4%. Similarly, the incidence of graduates without any type of working experience has increased over the last ten years reaching 34.6% in 2020 (+8.9 percentage points compared to graduates in 2010). It will be worth monitoring this trend in the coming years, particularly bearing in mind the current emergency situation due to the Covid-19 pandemic.

Any kind of working experience while studying represents 66.0% of first-level graduates; 6.2% are working-students. Graduates who have had work experience are more frequent in sports sciences and physical education (82.2%), education (80.3%), law (75.9%) and politics, social sciences and communications (75.0%). This type of experience is less frequent in engineering and engineering trades, health, information and communication technologies (ICTs) as well as in natural sciences, mathematics, physics and statistics (55.0%, 57.2%, 58.0% and 58.3% respectively), although it involves more than half of graduates. Except for information and communication technologies (ICTs), these last groups show a very low percentage of working students (from 2.5% to 3.5%), which are more predominant in law (23.2%), education (15.1%), politics, social sciences and communications (10.9%) and sports sciences and physical education (10.1%).

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 (56.1%) are involved in working activities, ranging from 43.8% of graduates in health and pharmacy to 75.6% of graduates from the education. However, it is true that only 3.6% of new single-cycle second-level graduates are actually working students.

67.1 % of two-year masters worked during their studies. The share of working students still remains low (8.9%), although it reaches far from negligible levels among graduates in health (34.6%) and education (25.6%).

4. Study circumstances

4.1. Lectures attendance

In 2020, 70.4% of graduates regularly attended lectures for at least 3/4 of the subjects scheduled: 70.2% for first-level graduates, 61.6% for single-cycle second-level graduates and 75.0% for two-year masters (Figure 6). Lecture attendance has been slowly but steadily increasing in the last few years: in 2010 67.8% of all graduates attended regularly lectures.

⁸ 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.

70.2 75.0 70.4

Two-year

master

Single-cycle second-level

Figure 6 - 2020 graduates: regular attendance of at least 75% of lectures by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

First-level

As previously mentioned, 70.2% 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 (92.2%), architecture and construction (84.0%), engineering and engineering trades (80.1%) and natural sciences, mathematics, physics and statistics (78.0%). Conversely, lecture attendance was relatively lower among graduates from education (46.0%), psychology (56.6%) and politics, social sciences and communications (59.3%).

Altogether, single-cycle second-level graduates report regular attendance at lectures in 61.6% of cases. This result, however, is due in particular to the fact that graduates in law, who make up 32.7% of the total number of single-cycle second-level students, attend a relatively small number of lectures and attend relatively few lectures (only 37.5% attend regularly), while in the other fields of study, 55.0% of graduates in education and 89.0% in architecture and construction attended lectures.

During the experience of two-year masters, there were particularly high levels of attendance at lectures (75.0%). Attendance varies considerably according to the field of study, from the lowest percentage in education (41.3%) to the highest in architecture and construction (89.7%), engineering and engineering trades (83.8%) and natural sciences, mathematics, physics and statistics (82.4%).

2020 TOTAL

GRADUATES

4.2. Scholarships and other student support serivices

Among graduates in 2020, besides scholarships (24.5%) the services used at least once and provided by the right to education body were canteens/foodservice (34.8%), book loans (33.9%), transport subsidies (20.0%), aid for international mobility (16, 0%), vouchers for the purchase of books and computer equipment (9.4% and 8.8% respectively), health care (8.4%), part-time work (8.0%), rent subsidy (7.5%), housing (4.3%) and services for disabled students (4.1%).

In general, graduates are satisfied with the student support services provided by the institution for the right to education, with peaks of 92.5% for the loan of books and 82.7% for housing quality. Nevertheless, there are critical areas related to rent subsidies, vouchers for the purchase of books and computer equipment as well as vouchers for the purchase of books, for which more than 40.0% of users are unhappy with.

As established by the Italian Constitution (art. 34, paragraphs 3 and 4), the scholarship 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).

Scholarships are less frequent among single-cycle second-level graduates (18.9%), 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 (31.5%), information and communication technologies (30.2%) and education (29.0%). 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/or 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. 56.5% self-assessed their knowledge of written English with an "at least B2" level, while the knowledge of other languages is much lower. As for other foreign languages, in fact, in terms of written skills with an "at least B2" level, 11.0% know Spanish, 8.2% French and 3.1% German. As to language skills, the survey has been adapted to the Common European Framework since a couple of years ago, hence it is not possible to analyse trends over a wide time frame. A positive trend in English language proficiency is shown by the comparison with the previous survey.

⁹ 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. The detailed descriptions of each level is available at http://www.europa.eu/europass/system/files/2020-05/CEFR%20self-assessment%20grid%20EN.pdf.

By focusing on English language, written knowledge (at least at B2 level) concerns 50.9% of first-level graduates, 57.1% of single-cycle second-level graduates and 67.4% 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 (90.2%), followed by engineering and engineering trades (59.2%) and information and communication technologies (58.0%). On the other hand, it is much more limited among graduates from education (19.5%) and sports sciences and physical education (27.8%). Among single-cycle second-level graduates, English written proficiency is particularly high among graduates in education (84.2%), while they are significantly lower than average in architecture and construction and law (42.9% and 44.9% respectively). For two-year masters, English knowledge at least at B2 level relates to almost all graduates in foreign languages (94.1%), but also shows high levels among graduates in information and communication technologies (84.4%) and engineering and engineering trades (79.1%); values below 40% are recorded in the education (36.0%), health (37.3%) and sports sciences and physical education (39.4%).

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 88.6% of 2020 graduates. This is followed, in decreasing order of knowledge, by word processor (72.5%), operating systems (69.2%), presentation tools (65.1%) and spreadsheets (60.2%). The least known include programming languages (14.8%), assisted design (13.4%), databases (13.2%), data transmission networks (11.0%) and website creation (10.4%). 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 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 the each course of study. For example, assisted design is a tool known in particular by graduates in architecture and construction (97.8% 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, 92.7%, 81.5%, 68.6% and 62.7% have a level of knowledge that is "at least good" respectively).

In trend terms, the level of knowledge of IT tools seems to be in general declined. 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 2020 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 age at enrolment, 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, 84.4% 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 (87.5%).

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 (60.0%); the reason is mainly to be found in the delay accumulated during the first-level degree. In fact, more than 40% of the two-year masters completed the previous three-year course with at least one year's delay.

The age at graduation for 2020 graduates is 25.8 years, with clear differences depending on the degree type: 24.5 years for first-level graduates, 27.1 for single-cycle second-level graduates and 27.2 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 2010) until 2018, to then remain more or less unchanged.

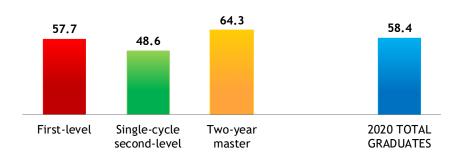
The average age at graduation among first-level graduates ranges from 23.8 years in the engineering and engineering trades to 27.4 years in law. The average age at graduation of single-cycle second-level graduates has a relatively low variation, ranging from 26.8 years in law to 27.7 years in veterinary as well as education. The average age of two-year masters is 27.2 years: engineering and engineering trades and economics (26.5 years), health (29.2 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 - 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 year such improvement was the result of the extension of the closure of the academic year granted to students due to the Covid-19 emergency. While in 2010 39.0% of all graduates completed their course of studies on time, in 2020 the percentage reached 58.4% (Figure 7). By contrast, while ten years ago 14.8% of graduates completed their course of studies four or more years after their course of study schedule, this proportion has now almost halved (7.6%).

Summary of the 23rd Survey on the 2020 Graduates' Profile

¹⁰ It is useful to remember that, due to the Covid-19 pandemic emergency, article 101, paragraph 1 of Decree Law no. 18 of 17 March 2020 extended the end of the academic year to 15 June. Thus, for 2020 graduates the ending date considered for the academic year was 15 June 2020 and not 30 April (the sate considered in the previous years).

Figure 7 - 2020 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 (57.7%). As many as 70.4% of graduates in psychology complete their course of study within the three years prescribed by regulations. Conversely, 38.1% of graduates in architecture and construction manage to graduate on time.

As for single-cycle second-level graduates, 48.6% of them obtained their degree whitin 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) andhealth and pharmacy are regular (76.5% and 54.1% respectively). On the other hand, only 22.9% of graduates in architecture and construction and 30.8% in veterinary are regular.

Compared to first-level graduates, there is even greater degree completion time for two-year masters, where 64.3% of graduates complete their course with peaks of over 75% for graduates in sports sciences and physical education (79.0%), health (78.0%) as well as agriculture and forestry (76.5%). On the other hand, graduates from the architecture and construction, arts and design and humanities and literature are less regular (41.3%, 51.1% and 53.0% 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 the graduate's accumulated delay and the prescribed course of study duration (both expressed in years). 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 0.39, which means that it takes them on average 39% longer to complete their degree than the prescribed duration of the course; single-cycle second-level graduates take 31% longer (delay index equal to 0.31), 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 area of university, lectures attendance, scholarship and work while studying.¹¹

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 32.6% 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 graduate in architecture and construction takes almost four 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 21.6% 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 20.5% more delay than the usual duration. There are similar effects for those who are studying workers where the accumulated delay is 14.4% more. Finally, compared to those who had access to a scholarship, those who did not receive one accumulate a delay of 6.3% more. There are also considerable differences with reference to the geographic area of university: compared to those who graduate in the North, those who obtain their degree in the Centre take 7.1% longer and those who graduate in the South 12.4% 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.

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¹¹The model does not consider pre-Reform D.M. n. 509/1999 graduates. Gender, citizenship, parents' educational qualification, social status, type of high school/secondary school diploma, degree type, mobility for study reasons, delayed enrolment, 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 and doing internships recognised by the course were excluded from the model because of their poor informative contribution. A model with the same definition of covariates was applied to a logarithmic transformation of the delay index, confirming the results here presented.

Table 1 - 2020 graduates: linear regression model for the assessment of the delay index

	b	S.E.
High school/secondary school diploma mark (average, out of 100)	-0.005	0,000
Field of study (Sports sciences and physical education=0)		
Education ***	0.007	0.005
Arts and design	0.158	0.006
Humanities and literature	0.206	0.005
Foreign languages	0.174	0.005
Politics, social sciences and communications	0.097	0.005
Psychology	0.036	0.005
Economics	0.098	0.005
Law	0.145	0.005
Natural sciences, mathematics, physics and statistics	0.177	0.005
Information and communication technologies (ICTs)	0.204	0.007
Architecture and construction	0.326	0.005
Engeneering and engeneering trades	0.249	0.005
Agriculture, forestry and veterinary	0.156	0.006
Health and pharmacy	0.089	0.005
Geographic area of the University (North=0)		
Centre	0.071	0.002
South and Islands	0.124	0.002
Attended classes on a regular basis (more than 75% of prescribed classes=0)		
less than 25%	0.205	0.004
25% to 50%	0.166	0.003
50% to 75%	0.106	0.002
Took advantage of scholarships (yes=0)	0,000	0,000
no	0.063	0.002
Work during studies (no work experience=0)		
studying workers	0.144	0.003
working students	0.059	0.001
Constant	0.159	0.005

Note: R-squared = 0.147 (adjusted R-squared = 0.147), N = 237.420

Source: AlmaLaurea, Graduates' Profile Survey.

7. Graduation mark

In the last few years, the average graduation mark has remained substantially unchanged (103.2 out of 110 in 2020, compared to 103.0 out of 110 in 2010), but with appreciable variations by degree type: 100.1 among first-level graduates, 105.6 among single-cycle second-level graduates and 108.0 among two-year masters (Figure 8).

While the average graduation mark for first level courses is 100.1, considerable variations can be observed depending on the field of study with graduation marks ranging from 104.9 for humanities and literature and 104.8 for health to 96.3 for economics and 97.0 for engineering and engineering trades. The average graduation mark for single-cyclesecond-level course of study, 105.6 out of 110, shows a smaller range of variation, from 102.3 among graduates in law to 107.5 among graduates as in health and pharmacy as in architecture and construction. The two-year masters show a very high average graduation mark (108.0), 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 7.6 points out of 110 compared to the degree obtained in the

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

first-level course of study. 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).

First-level Single-cycle second-level master GRADUATES

Figure 8 - 2020 graduates: graduation mark by degree type (average, out of 110)

Note: while 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 model¹² was applied (Table 2). The analysis took into account the following factors: type of high school/secondary school diploma, high school/secondary school diploma mark, degree type, field of study, lecture attendance, cultural reasons for the choice of the degree programme, geographic area of the high school/secondary school and work during studying. Such model prooves strong differences by degree type. All other things being equal, it is estimated that a single-cycle second-level graduate and a two-year master achieve more points (+2.5 and +8 respectively) than a first-level graduate. A strong heterogeneity in terms of fields of study is also confirmed. Indeed, considering the two opposit ends, a degree in the health and pharmacy results in a boost in terms of degree marks of almost 8 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. That obviously includes the type of diploma obtained, all other conditions being equal. In this respect, a graduate with a high school diploma obtains, ceteris paribus, more points while a graduate with a technical secondary school diploma obtains (almost +4 points and almost +2 points respectively) than a graduate with a professional 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

¹² The model does not consider pre-Reform D.M. n. 509/1999 graduates. Factors related to social status and geographic distribution of the university were taken into account although they were not found to be significant. Gender, parents' qualification, citizenship, size of the university, delayed enrolment, 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 were excluded from the model because of their poor informative contribution.

do not work while studying score almost +2 points than those who work continuously and full-time. Choosing to study elsewhere than their hometown has a negative impact on their degree grade. In fact, who graduated in the same geographic area in which they obtained their high school/secondary school degree as those who changed their geographic area scored more points at the end of their university course (about +5 points and more than 3 points respectively) than who achieved the high school/secondary school diploma abroad. 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.

Table 2 - 2020 graduates: linear regression model for the assessment of graduation mark

	b	S.E.
Diploma (professional=0)		
high school	3.994	0.085
technical	1.831	0.088
High school/secondary school diploma mark (average, out of 100)	0.265	0.001
Degree type (First-level=0)		
Single-cycle second-level	2.503	0.053
Two-year master	8.228	0.030
Field of study (Engeneering and engeneering trades=0)		
Health and pharmacy	7.673	0.057
Arts and design	7.469	0.083
Education	6.932	0.071
Humanities and literature	6.728	0.069
Sports sciences and physical education	5.745	0.095
Agriculture, forestry and veterinary	5.293	0.086
Politics, social sciences and communications	4.968	0.060
Foreign languages	4.701	0.062
Psychology	4.411	0.071
Law	4.109	0.083
Architecture and construction	3.821	0.074
Natural sciences, mathematics, physics and statistics	3.641	0.055
Information and communication technologies (ICTs)	3.568	0.106
Economics	2.110	0.052
Attended classes on a regular basis (less than 25% of prescribed classes=0)		
25% to 50% ***	0.125	0.080
50% to 75%	0.619	0.070
more than 75%	2.896	0.067
Relevance of cultural reasons for the choice of degree programme (not definitely	yes=0)	
definitely yes	1.465	0.030
Geographic area of the high school/secondary school (abroad=0)	***************************************	
same province as the place of study	5.476	0.328
neighbouring province	5.067	0.328
another non-neighbouring province in the same geographic area	5.168	0.329
another geographic area	3.482	0.329
Work during studies (studying workers=0)		
working students	1.166	0.056
no work experience	1.870	0.059
Constant	77.383	0.348

Note: R-squared = 0.430 (adjusted R-squared = 0.430), N = 261.348

Source: AlmaLaurea, Graduates' Profile Survey.

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

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

The variability of the graduation mark whether among different courses of study or different universities considering the same field of study, is also the result of a number of casual institutional factors: standards for awarding marks in exams, criteria for awarding the final mark and any extra points, standards for assessing and the complexity of the final papers, etc. A more in-depth study carried out on 2020 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. As we said before, the pandemic emergency has not substantially affected graduates' satisfaction ratings, as the emergency involved only a limited part of the university experience. In 2020, 26.7% of graduates said they were definitely satisfied with their relations with the lecturers while a further 61.9% 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 88.6%. As for the evaluation of classrooms attended by 98.7% of graduates, 28.6% rated them "always or almost always appropriate" and a further 49.5% "often appropriate". Library services (i. e. loan/consultation and opening hours), used by 83.8% of graduates, were evaluated as "definitely positive" by 42.5% of users and "quite positive" by another 50.9%. Computer workstations, used by 71.5% of new graduates, are rated as "available in an appropriate number" by 55.8% of users. Individual study areas were used by 79.6% of students and more than half (58.2%) considered them "appropriate". As for the rating of the equipment for teaching purposes, (i.e. workshops and practical activities) among those who used them (79.6%), 28.0% considered them "always or almost always appropriate". If 46.6% of those who considered them "often appropriate" are added, the overall satisfaction is 74.6%.

Exams administration (including exams session, timetables, information, bookings) was judged as "always or almost always" appropriate by 38.3% of graduates, with a further 46.7% defining it as appropriate "for more than half of the exams". Hence, the overall level of satisfaction was equal to 85.0%.

The overall satisfaction with the course of study is an element that sums up the various aspects of the university experience, where 43.6% of graduates were decidedly satisfied and another 47.2% are fairly satisfied, for an overall incidence of 90.8% (Figure 9). This proportion has been increasing in recent years (i.e. in 2010 it was 86.9%).

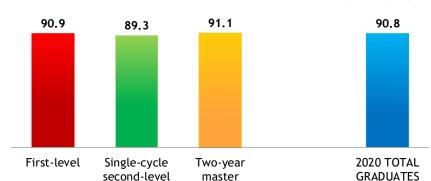


Figure 9 - 2020 graduates: overall satisfaction of the course of study by degree type (percentage values)

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: 42.0% of graduates say they are definitely satisfied, 48.9% are fairly satisfied, for an overall satisfaction of 90.9%. The most satisfied are first-level graduates from education (94.9%), law (93.2%), psychology (93.1%) as well as natural sciences, mathematics, physics and statistics (92.9%). The most satisfied are first-level graduates from education (94.9%), law (93.2%), psychology (93.1%) as well as natural sciences, mathematics, physics and statistics (92.9%). Despite the gap is generally small, graduates in foreign languages (85.7%), sports sciences and physical education (87.7%) and architecture and construction (88.7%) are more critical in their evaluations.

Among single-cycle second-level graduates, 40.9% said they were definitely satisfied with their university experience and 48.4% were fairly satisfied, for an overall satisfaction of 89.3%. Particularly satisfied are graduates in education (94.8%) while graduates in architecture and construction (86.1%) besides health and pharmacy (87.9%) are more critical.

47.7% of two-year masters are definitely satisfied with their course of study with a further 43.4% being fairly satisfied. The overall level of satisfaction with the latest university experience is therefore 91.1%. The most satisfied are graduates in information and communication technologies (93.6%), psychology (92.7%), engineering and engineering trades (92.7%), humanities and literature (92.6%) and economics (92.2%). By contrast, the most critical are graduates in health (81.6%).

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 72.8% of the entire population (Figure 10), a percentage that is higher than that of 2010 (68.6%). Another 8.9% of graduates would confirm the university, but would move on to another course of study, 10.6% 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 2.1% would no longer enrol at the university (as for the two-year masters, reference is made only to the final two years).

71.7 69.8 76.1 72.8

First-level Single-cycle Two-year 2020 TOTAL GRADUATES

Figure 10 - 2020 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 10.4% 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. 5.7% would change both course of study and location and only 1.7% would no longer enrol at the university. 78.7% of first-level graduates in psychology and 77.9% of graduates in information and communication technologies (ICTs) agreed that their experience was fully confirmed. On the other hand, the percentage of those who would fully confirm their experience is lower among graduates in foreign languages (58.8%), who would often change their course, university or both of them.

If they could go back, 69.8% of single-cycle second-level graduates would choose their course of study and university again (from 58.2% of graduates in architecture and construction to 86.0% of graduates in education). 16.5% 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 76.1% of graduates. Again, the situation changes depending on the field of study: from 70.4% of graduates in health to 80.4% in humanities and literature.

9. Post-graduate study and work prospects

9.1. Study prospects

Among graduates in 2020, 66.7% intend to continue their post-graduate education (Figure 11). However, this share has been increasing over time (64.0% in 2010) and this is clearly reflected in the last few years.

As might be expected, this trend is particularly marked among first-level graduates (82.1%), who intend to move largely towards a two-year master's degree (66.3%), and among single-cycle second-level graduates (66.4%), for whom specialisation schools (33.0%), academic masters (10.0%) and

internships/legal internships (9.6%) are the most frequently prospect. Although two-year masters are partially less likely to continue their studies (37.6%), they are strongly attracted by a PhD: 13.4%.

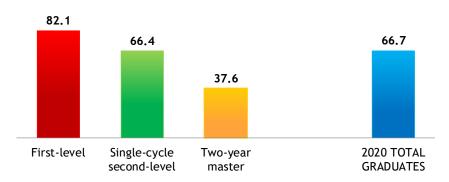


Figure 11 - 2020 graduates: intention of continuing studies by degree type (percentage values)

Source: AlmaLaurea, Graduates' Profile Survey.

Among first-level graduates, the intention to continue their studies is particularly widespread among graduates in psychology (95.4%), humanities and literature (91.5%) and engineering and engineering trades (90.6%). On the other hand, graduates in law (61.4%), information and communication technologies (64.5%) and education (67.9%) 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 66.3% of graduates: it is particularly wished for by graduates in psychology (90.2%), engineering and engineering trades (87.1%), natural sciences, mathematics, physics and statistics (83.6%) as well as humanities and literature (83.0%). In detail, 71.3% of first-level graduates intend to enrol in a two-year master's degree to complete and enrich their education. This percentage varies from 93.3% in health (where the number of those who intend to continue their education with a two-year master's degree is definitely low) to 59.1% in humanities and literature, 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, 64.9% 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 77.6% in engineering and engineering trades to 51.8% in foreign languages). Finally, focusing on other training alternatives, 7.9% of first-level graduates intend to enrol in an academic master, a particularly attractive qualification to graduates in health (29.7%).

As mentioned above, 66.4% 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 health and pharmacy (78.7%, with 61.6% going on to postgraduate specialisation), and lower among graduates in architecture and construction (38.8%, with 13.1% heading towards an academic master and 7.7% towards a PhD), as well as in education (39.5%, with 10.6% heading towards a specialist school and 7.6% an academic master). The share of graduates in law who intend to continue their studies is 65.1%. A relatively high share of them is likely to continue their studies with a legal internship (26.4%).

As previously highlighted, 37.6% of two-year masters intend to continue their studies. In particular, two-year mastes in psychology (78.8%, with 26.4% planning an internship and 25.9% a post-graduate

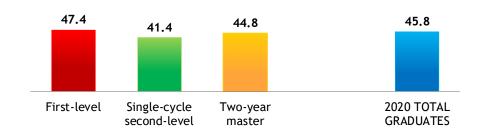
specialisation), natural sciences, mathematics, physics and statistics (53.2%, with 32.9% planning a PhD), health (50.9%, with 28.2% planning an academic master) and humanities and literature (49.8%, with 25.3% planning a PhD). Conversely, graduates from engineering and engineering trades (21.4%, mainly with a PhD) and economics (23.0%, mainly with a master's degree) are less likely to continue their studies.

9.2. Work prospects

As for work prospects, the long-standing mobility for study/work reasons from the South to the North still characterises the Italian scenario. However, such trend has been complemented by mobility towards foreign countries, a target that a growing number of young graduates are looking to for both study and work purposes.

The willingness to work abroad is stated by 45.8% of graduates (42.0% in 2010) and, after a period of increase that lasted until 2015 (when the percentage exceeded 50%), in the most recent years there has been an appreciable contraction. Distinguished by degree type, this share is 47.4% for first-level graduates, 41.4% for single-cycle second level graduates and 44.8% for two-year masters (Figure 12).

Figure 12 - 2020 graduates: definitely open to working abroad by degree type (percentage values)



Source: AlmaLaurea, Graduates' Profile Survey.

30.4% are even ready to move to another continent. In spite of the clichés that portray graduates as unwilling to move for work purposes, there is a widespread willingness to travel for business, even frequently (28.2%), as well as to change place of residence (47.1%). Only 3.4% were not willing to travel instead.

Despite being contracts aimed at increasing workers protection and full-time contracts the forms of employment most appreciated by graduates (83.6% and 84.3% are decidedly willing to accept them, respectively), there is also a remarkable willingness to work part-time (36.4%) and for fixed-term employment contracts (33.8%). There was a strong increase in the willingness to work remotely (31.7%), an option that until now had been rarely employed but which in this pandemic period has been useful and revalued both by companies and (as in the data under examination showed) by graduates (+21.4 percentage points compared to 2010 where +11.1 percentage points are linked to last year). Among the aspects considered to be decidedly relevant in seeking a job, the one that has long been of most interest is the professional development indicated by 79.1% of graduates. Also of great importance (percentages above 60%) are the request for job stability (70.5%), the opportunity to make a career

(68.5%), the opportunity to make a living (64.4%) and the opportunity to make the best use of the skills acquired during the course of study (62.6%). Graduates attribute a different weight to the abovementioned aspects depending on the degree type: in particular, single-cycle second-level graduates, in addition to the above-mentioned aspects, attribute more weight to education-job match (67.3%), personal independence or freedom (64.8%) and job perceived usefulness (55.9%).

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