

# XXIII Survey Graduates' Profile 2020

**Report 2021** 

# Methodological Notes to the online database

www.almalaurea.it/en/universita/indagini/laureati/profilo

With the support of

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# METHODOLOGICAL NOTES

# 1. Reference population

The Survey about 2020 Graduates' Profile has involved 290,772 graduates in 2020 of 76 Italian universities in AlmaLaurea Consortium<sup>1</sup>. Some categories of graduates were excluded from the population analysed in the 2020 Profile since they gained their university qualification as a result of special arrangements. They are 1,630 graduates from 55 universities with some particular features:

- Healthcare workers, whose professional experience was accredited by the University to the purpose of a three-year degree in the healthcare subject area or members of the Law Enforcement Agencies and Armed Forces, public officials, and other categories of students who completed one of the degree programmes that had been specifically designed for them. What is more, often these graduates do not complete the questionnaire.
- Graduates with a small number of exams passed (less than two exams in one year).
- Graduates with very short academic careers, with a duration of less than a quarter of the legal duration of degree programme.

The survey involves all the graduates of a given calendar year and makes available documentation that is reliable down to the level of a single degree programme. This allows the universities, belonging to the AlmaLaurea Consortium, to respond promptly to the Ministry of University and Research requests (Italian Ministerial Decree no. 544/2007, Directorial Decree no. 61/2008, Italian Ministerial Decree no. 17/2010, Italian Ministerial Decree 50/2010 and, among the most recent, Italian Ministerial Decree no. 635/2016, Italian Ministerial Decree no. 987/2016 and Italian Ministerial Decree no. 989/2019).

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<sup>&</sup>lt;sup>1</sup> Among these there are also the Scuola Superiore Sant'Anna of Pisa, the Scuola Normale Superiore of Pisa and the Scuola Superiore IUSS of Pavia. Given the peculiar nature of these schools, for the moment their data sheets are not included in the current search system. Moreover, the European University of Rome is not a member of the Consortium, but has entered into an agreement with it to carry out statistical surveys.

In the Table 1 there are the universities involved in 2020 Graduates' Profile Survey and the corresponding number of graduates.

Table 1 Graduates surveyed in 2020 Profile for university (absolute values)

| university                | graduates | university                     | graduates |
|---------------------------|-----------|--------------------------------|-----------|
| Bologna                   | 19,234    | Brescia                        | 2,490     |
| Roma Sapienza             | 18,166    | L'Aquila                       | 2,466     |
| Torino                    | 14,746    | Sassari                        | 2,346     |
| Padova                    | 13,498    | Napoli Parthenope              | 2,158     |
| Napoli Federico II        | 12,974    | Napoli L'Orientale             | 2,143     |
| Milano                    | 11,708    | Piemonte Orientale             | 2,126     |
| Firenze                   | 9,777     | Insubria                       | 2,046     |
| Palermo                   | 7,609     | Foggia                         | 2,040     |
| Torino Politecnico        | 7,570     | Macerata                       | 2,038     |
| Pisa                      | 7,510     | Napoli Benincasa               | 1,933     |
| Milano-Bicocca            | 7,495     | Bari Politecnico               | 1,859     |
| Bari                      | 7,197     | Milano IULM                    | 1,745     |
| Catania                   | 6,360     | Catanzaro                      | 1,667     |
| Salerno                   | 5,840     | Tuscia                         | 1,546     |
| Genova                    | 5,704     | Roma LUMSA                     | 1,414     |
| Roma Tre                  | 5,541     | Cassino e Lazio Meridionale    | 1,366     |
| Venezia Ca' Foscari       | 5,532     | Venezia IUAV                   | 1,149     |
| Roma Tor Vergata          | 5,238     | Molise                         | 1,141     |
| Parma                     | 5,207     | Camerino                       | 990       |
| Verona                    | 5,203     | Enna Kore                      | 989       |
| Modena e Reggio Emilia    | 5,139     | Teramo                         | 906       |
| Pavia                     | 4,740     | Basilicata                     | 851       |
| Calabria                  | 4,387     | Bolzano                        | 824       |
| Perugia                   | 4,379     | Sannio                         | 794       |
| Chieti e Pescara          | 4,358     | LIUC Carlo Cattaneo            | 786       |
| Campania Luigi Vanvitelli | 4,252     | Reggio Calabria Mediterranea   | 747       |
| Bergamo                   | 3,898     | Milano Vita-Salute S. Raffaele | 680       |
| Ferrara                   | 3,887     | Roma UNINT                     | 608       |
| Messina                   | 3,864     | Roma Foro Italico              | 567       |
| Trento                    | 3,863     | Roma Campus Bio-Medico         | 537       |
| Cagliari                  | 3,740     | Siena Stranieri                | 446       |
| Udine                     | 3,065     | LUM Giuseppe Degennaro         | 338       |
| Trieste                   | 3,022     | Roma Europea                   | 310       |
| Marche Politecnica        | 3,018     | Valle d'Aosta                  | 260       |
| Siena                     | 2,946     | Perugia Stranieri              | 207       |
| Urbino Carlo Bo           | 2,757     | Scienze Gastronomiche          | 124       |
| Salento                   | 2,711     |                                |           |

 ${\tt Source: AlmaLaurea, Graduates' Profile Survey.}$ 

The Report analyses degree holders of post-reform university degree programmes (that were implemented by the Italian Ministerial Decrees no. 509/1999 and 270/2004). They are graduates of first-level degree programme, of single-cycle second-level degree programme, of second-level degree programme and of Primary Education Sciences degree programme (pre-reform), but also the other pre-reform degree holders (in degree programmes started before applying the Italian Ministerial Decree no. 509/1999) (Table 2).

Table 2 Graduates surveyed in 2020 Profile for degree programme type (absolute values)

| degree programme type                                    | number of<br>graduates<br>surveyed<br>in 2020 Profile |
|--|---|
| First-level degree programme                             | 165,356   |
| Single-cycle second-level degree programme               | 35,771  |
| Second-level degree programme                            | 88,548  |
| Primary Education Sciences degree programme (pre-reform) | 152   |
| Other pre-reform degree programme                        | 945   |
| TOTAL  | 290,772   |

Source: AlmaLaurea, Graduates' Profile Survey.

The Italian Ministerial Decree no. 270/2004 has redefined the degree classification introduced by the Italian Ministerial Decree no. 509/1999, showing also the corrispondence between the new classes (Italian Ministerial Decree no. 270/2004) and the previous ones (Italian Ministerial Decree no. 509/1999). The majority of 2020 graduates comes from 270 classes (Italian Ministerial Decree no. 270/2004): 98.9% of first-level degree graduates, 97.3% of single-cycle second-level degree graduates and 99.7% of second-level degree graduates. In the Survey on Graduates' Profile there is not a distinction between graduates from 509 classes (Italian Ministerial Decree no. 509/1999) and graduates from 270 classes (Italian Ministerial Decree no. 270/2004).

For the particular case of the single-cycle second-level degree programme in Dentistry and orthodontics, it should be noted that regulation 270 (Italian Ministerial Decree no. 270/2004) changed the

prescribed duration of the degree programme, extending it from 5 to 6 years. For this reason, when analysing the graduates of the 509 and 270 degree programmes (Italian Ministerial Decrees no. 509/1999 and 270/2004) at the same time the different durations of the programme must be taken into account, especially when considering the "duration of studies" indicator.

The Report analyzes graduates in different field of study provided by the national offer of academic degree subject (Table 3).

Table 3 Graduates surveyed in 2020 Profile for field of study (absolute values)

| ·   |                                 |
|---|---------------------------------|
| field of study  | number of graduates<br>surveyed |
| field of Study  | in 2020 Profile                 |
| Agriculture, forestry and veterinary                  | 8,366                           |
| Architecture and construction                         | 12,827                          |
| Arts and design                                       | 9,034                           |
| Economics   | 43,212                          |
| Law   | 14,758                          |
| Information and communication technologies (ICTs)     | 4,920                           |
| Engineering and engineering trades                    | 32,412                          |
| Education   | 15,363                          |
| Humanities and literature                             | 15,210                          |
| Foreign languages                                     | 20,780                          |
| Health and pharmacy                                   | 39,849                          |
| Politics, social sciences and communications          | 24,927                          |
| Psychology  | 13,578                          |
| Natural sciences, mathematics, physics and statistics | 29,139                          |
| Sports sciences and physical education                | 6,397                           |
| TOTAL   | 290,772                         |

Source: AlmaLaurea, Graduates' Profile Survey.

From a comparison with the most recent national data of the Minister of University and Research (graduates in the solar year 2019), the composition of AlmaLaurea population fairly closely represents the overall national framework by degree programme type, field of study and geographical distribution. More in detail, there is a sub-

representation of universities of the North-West (22.7% of AlmaLaurea graduates against 27.9% of total graduates in Italy), in particular of Lombardy, due to the fact that, among the universities belonging to AlmaLaurea Consortium, Bocconi University, Catholic University and the Polytechnic of Milan are not included.

# 2. Detection methodology and response rate

The 2020 Graduates' Profile is based on the combination of the following sets of data:

- Administrative records of the 76 universities which became members of AlmaLaurea before 2020. The Survey is based on the administrative data transmitted from universities to AlmaLaurea before the step of data processing.
- Replies to the questionnaires AlmaLaurea on the evaluation of the academic path of study: this questionnaire includes all the information about the academic experience of the graduates detected some times before degree completion.

Administrative data about graduates are transmitted from each university to AlmaLaurea throughout the calendar year according to a shared path and they are submitted to various quality checks.

For graduates who already have a previous qualification in the AlmaLaurea database, some questionnaire information is not requested as it can be retrieved from AlmaLaurea statistical archives.

Undergraduates, on the eve of degree completion, access to the compilation of the survey questionnaire through their own homepage on the website <a href="www.almalaurea.it">www.almalaurea.it</a>. After that, the questionnaires are matched to the administrative records and then they are submitted to some consistency checks. The questionnaire can be completed up to 9 months before the expected date of graduation as declared by the student. For this reason, not all graduates of the same year of graduation complete the version of the questionnaire for that specific year: among the graduates of 2020, the percentage of those who completed a version different from that of 2020 is 6.2%.

Graduates involved in the Survey are only those who have completed the degree programme during the calendar year analyzed

and only those who are not included in the particular categories described in the previous paragraph.

The information detected through the questionnaire are reliable if they satisfy some criteria of good filling in of the questionnaire. Graduates whose questionnaires present the following limits were omitted from the 2020 Profile analyses:

- Insufficient degree of completion: the questionnaires were empty or too few questions were answered (less than 25% of answers have been given).
- Implausibility: in batteries containing multiple questions sharing the sample response format, graduates repeatedly used the same response category (e.g., "definitely yes") for each item.
- Excessive haste: graduates completed the questionnaire too quickly (less than 4 seconds, on average, per question) to guarantee reliable responses.

The overall response rate, defined as the ratio between the number of graduates who has filled in the questionnaire in a good way and the number of graduates who has participated to the Survey, was 92.8% in 2020.

# 3. Availability of data

Graduates' Profile Report is divided into 10 thematic sections: Personal information, Social background, Upper secondary education, Academic performance, Study conditions, Work during university classes, Assessment of university experience, Foreign language and IT skills, Prospects for further studies, Prospects for employment.

The documentation analysed here takes into account the following groups:

- All degree holders (290,772), in terms of Personal information, Upper secondary education, Academic performance (with the exception of previous university experiences and reasons for the choice of degree programme). The sources for this information are universities' administrative records, except for information concerning place of residence and high-school leaving certificate

- (administrative records were integrated with data collected through AlmaLaurea questionnaires, when available), and for high-school marks (when marks were missing in the university records they were retrieved through the questionnaire).
- All degree holders who filled and returned the questionnaire (269,918, that is 92.8% of the target population), as regards the sections Social background, Study conditions, Work during university classes, Assessment of university experience, Foreign language and IT skills, Prospects for further studies, Prospects for employment and for previous university experiences and very important reasons for the choice of degree programme (Academic performance section).

The 2020 Graduates' Profile Report is available in digital format. It is also possible to consult data through an online query system. The documentation, microdata included, is transferred from each university present in the Survey to AlmaLaurea.

Documentation can be examined by making a choice in each of the two sections of the consultation form: selecting the reference population, it is possible to compare groups of graduates through an analysis set on a specific comparison variable.

#### 3.1 Available variables for selecting the cohort

It is possible to restrict the analysis to particular cohorts on the basis of variables such as year of graduation, degree programme type, university, Faculty/Department/School, field of study, degree classification, degree programme and recently enrolled.

To facilitate the consultation of the data all the available variables are displayed, but some are active only after making a specific selection: for example, the variable Faculty/Department/School is active only after having selected the university. Similarly, the degree classification is active only after having selected a degree programme type (except the Primary Education Sciences degree programme - pre-reform - and all the other pre-reform degree programmes). It should also be noted that, next to the name of each degree classification in brackets, the Ministry of University and Research's code is indicated according to the provisions of the Italian Ministerial Decree no. 270/2004 and, in the case of

correspondence between the two systems, the code established by the previous Italian Ministerial Decree no. 509/1999.

Regarding the year of graduation, it is possible to choose a single year of graduation or run an historical comparison by selecting "all". The time series refers only to the degree programmes/degree classifications grouping that, in the last year, have produced graduates.

As regards the field of study, it is used the degree classification adopted by the Italian Ministry of Education starting from 2020. It is based on the ISCED-F 2013 classification and it is applied to all cohorts of graduates.

The variable called degree programme is active, and therefore selectable, only after making a choice at level of degree programme type (except the Primary Education Sciences degree programme - prereform- and all the other pre-reform degree programmes), University and at least one variable between the Faculty/Department/School, field of study and degree classification. This happens since this variable uses the code defined by Off.F databank on the field of study: this variable associates a unique code to each degree programme activated in a given university (i.e., the code of the database of training supply). Sometimes a degree programme set up at a university could change is code, without modifying the formal name of the degree programme; for example it could happen after changes in the training content, in the attribution to its graduating class, etc. In these cases the degree programmes are treated separately, because the Off.F codes allocated to them are different or to facilitate the detection of these special cases, near the name of the degree programme there is the academic year up to which it was active; otherwise the academic year which it has become active. In other cases it is possible to find the specification of the place of study.

Moreover, it is possible that a degree programme has changed its name without modifying its Off.F code. Another case is when a degree programme incorporates one or more degree programmes with a name different from the most recent one. Next to that name is also shown that older preceded by "già".

The variable "recently enrolled" is available for all degree programme types of post-reform degree programmes, including the Primary Education Sciences degree programme (pre-reform), and makes it possible to distinguish between graduates recently enrolled and graduates enrolled many years ago.

Graduates enrolled in recent years are those who have a date of enrolment that allows a maximum delay in studies of one year compared to the prescribed duration (if the month of enrolment in the degree programme is between January and June, the previous calendar year is considered the enrolment year).

#### In detail:

- For the first level degree programme, at most four years before the degree is awarded
- For second-level degree programme, at most three years before the degree is awarded.
- For single-cycle second-level degree programme in Medicine and Surgery and Dentistry and dental prosthesis (the latter only for the Ministerial Decree no. 270/2004), at most 7 years before the degree is awarded.
- For single-cycle second-level degree programme (excluding the degree classification mentioned above), at most 6 years before the degree is awarded.
- For the Primary Education Sciences degree programme (pre-Bologna process reform), at most 5 years before the degree is awarded.

# 3.2 Available comparison variables

The comparison columns available are: degree programme type, university, Faculty/Department/School, field of study, degree classification, degree programme, recently enrolled, gender, work during university classes.

The last two variables can be selected only as comparison variables and not as variables of selection. It is important to remember that the variable degree programme for post-reform graduates identifies each degree programme activated in a given university (in some cases even at a particular location): therefore it is not possible to make a comparison between universities, since every degree programme on the territory is associated with a unique code.

Similarly, starting with the survey on 2012 graduates, the variable Faculty/Department/School is available only after having selected one university.

Therefore, also in this case, it is not possible to make a direct comparison between universities.

This decision is the result of the application of the law 240 in 2010, which has led to a major reorganization of university facilities.

#### 4. Conventions and further notes

#### 4.1 Calculation of the indicators and no-answers

The online reports give not only the number of graduates involved in the Survey and the number of graduates who have filled in the questionnaire, but also the percentages or the averages of the main variables analyzed.

The statistics about administrative data, transmitted for 100% of graduates, refer to the total number of graduates.

In general, statistics referring to the questionnaire variables are calculated on the total number of graduates who completed the survey questionnaire. However, some statistics have been calculated on specific sub-groups: in such cases, the cohort to which they refer is reported in the description of the indicator.

To improve the comprehension and the reading of the online report, the missing values, generally less than 3%, are not displayed: for this reason the sum of percentages, in some cases, could be less than 100 or less than the total in case of filtered indicators (specifically, the type of study abroad experience, the type of curricular internship and the intention to continue with post-graduate studies).

# 4.2 Rounded numbers

Percentages have been approximated to the first decimal place: because of this rounding of the values, the sum of percentages is sometimes different from 100 (with the exception of "no-answers" and when all the answers to a question are not displayed).

# 4.3 Conventional signs

The hyphen "-" is used in the tables when a phenomenon has been analysed, but no cases of it have occurred. The percentage value 0.0 indicates that the phenomenon has been found and that some cases occurred, but with a percentage that is lower than 0.05.

The symbol "\*" indicates that statistics have not been calculated, since they would have referred to a very small cohort (less than 5 units): in these cases the number of graduates analyzed in the Survey, the number of graduates that have filled in the questionnaire and the response rate are displayed.

The symbol "/", used only in the online form when the hystorical series is selected, indicates that the data is not available or not comparable with indicators of the last year of the Survey.

# 4.4 Useful information for interpreting the results

While analysing the results, it is important to consider the number of people in each cohort: if the number of graduates to be analysed is low, then you should read the results with all due attention.

Moreover, you should also consider that some cohorts of graduates, where the number of graduates that have filled in the questionnaire is less than 60% are marked with a specific note. This note underlines to interpret with particular caution the part of the documentation obtained from the questionnaire.

# 5. Definitions used and calculated index

# Age at graduation

The age at graduation is calculated on the basis of the date of birth and the graduation date. For percent distributions based on age at graduation, the actual age reached is used.

# Foreign citizens

The count of foreign citizens does not include graduates coming from the Republic of San Marino.

#### Residence

This classification takes into account the place where classes were held instead of the location of the university's main campus. Reference is made to the residence at the time of graduation. This indicator derives from the combination of the data collected with the questionnaire and, where not present, from the university's administrative archives.

#### Parents' education

The variable about parents' education considers the parent with the highest level of education and in the table is reported the distinction between the case where both parents are degree holders and the case in which only one parent is graduated. These latter categories also include those who have parents with a PhD degree.

Information on professional qualifications and four-year diplomas is collected from the 2018 questionnaire and is therefore not available for graduates who have completed the previous versions. For the reasons stated, the indicator "no parent with a university degree" differs from the sum of the modalities "high school diploma" and "professional secondary school, lower educational qualification or no educational qualification", as it includes the percentage of graduates with parents with at most high school diplomas and the percentage of graduates with lower middle-school certificates detected with the questionnaire versions prior to that of 2018.

#### Social class

As for the graduates' social background, we have followed the framework proposed by A. Cobalti and A. Schizzerotto in their book (La mobilità sociale in Italia, Bologna, il Mulino, 1994). Social class is defined by the socioeconomic status of the graduate's father and mother and corresponds to the highest of the two (principle of 'dominance'). Socioeconomic status can be defined as high class, clerical middle class, lower middle class and working class. The high class is dominant over the other three, the working class is at the lowest level, while clerical middle class and lower middle class are substantially balanced. If one graduate's parent belongs to the lower

middle class and the other to the clerical middle class, the social class of the degree holder is that of the father (in a situation like the above described one, it would not be possible to choose between the two social classes on the basis of the principle of dominance). Socioeconomic status of each parent is a function of the most recent job position, as illustrated in the following table. Graduates whose mother (or father) is a homemaker belong to the social class of the working parent (either father or mother). If both parents are noted as homemakers, the social class was not defined.

| last job position                         | socioeconomic status  |  |
|---|-----------------------|--|
| liberal professionals*                    |                       |  |
| high level managers                       | HIGH CLASS            |  |
| entrepreneurs with at least 15 employees  |                       |  |
| employees with coordinating duties        |                       |  |
| white collar employees                    | CLERICAL MIDDLE CLASS |  |
| middle managers                           |                       |  |
| teachers (excluded university teachers)   |                       |  |
| self-employed                             |                       |  |
| assistants in family business             | LOWER MIDDLE CLASS    |  |
| members of cooperatives                   |                       |  |
| entrepreneurs with less than 15 employees |                       |  |
| manual workers, subordinates, etc.        | WORKING CLASS         |  |
| low-level office workers                  | WORKING CLASS         |  |

<sup>\*</sup> Liberal professionals with a lower educational qualification than the secondary school-leaving certificate have been included in the self-employed people category.

#### Diploma

The diplomas shown refer to the field of study regardless of the school where they were obtained. The diplomas combine the field of study introduced with the reform of the school system that came into force in the 2010/2011 school year with those existing prior to the Reform. In detail, the high school specialised in humanities includes the social sciences high school and the socio-psycho-educational high

school or teaching institute. The high school specialised in fine arts, music and choreography includes art and other artistic diplomas. The technical secondary school specialised in economics and business includes the commercial, business, foreign language, social or feminine activities/social services and tourism schools; the technical secondary school specialised in technological subjects includes the industrial, surveyor, agricultural, nautical and aeronautical schools; the professional secondary school includes the services and industry and craftsmanship schools. The overall calculation of technical secondary school diplomas also includes technical diplomas prior to the Reform mentioned above, and therefore not related to the two disciplines specified, so the sum of economic and technological diplomas may sometimes be less than the total of technical diplomas. This indicator derives from the combination of the data collected with the questionnaire and, where not present, from the university's administrative archives.

# High school/secondary school-leaving certificate or diploma mark

The high school/secondary school leaving certificate or diploma mark (of which the average values are shown) is calculated for Italian diplomas and is expressed on a scale of 100 even for those who earned the diploma before 1999 when the scale was based on 60. This indicator derives from the combination of the administrative information communicated by the universities and, where not present, from the data collected with the questionnaire.

# Earned a high school/secondary school-leaving certificate or diploma

This classification takes into account the place where the classes were held instead of the location of the university's main campus. The categories "in Southern Italy, but graduated in Northern-Central Italy", "in Central Italy, but graduated in Northern or Southern Italy", "in Northern Italy, but graduated in Southern-Central Italy" do not include those who have attended high school in a neighbouring province to the one of graduation. In the few cases where information

on the place where the diploma was obtained is not available, information on the residence was used.

#### Have previous university experience

It combines the question about previous completed university experiences with the question about previous not completed university experiences. In cases where both experiences are present, only previous completed university experiences are counted. When asked about previous university experiences, graduates in the second-level degree programme are asked to specify the degree that entitled them to enter the second-level degree programme. Starting with the 2017 survey, a prior completed experience has always been attributed for access to the second-level degree programme even for those who did not answer to the questionnaire's question.

# University degree achieved before the enrolment in a secondlevel degree programme

The indicator is calculated only for second-level degree graduates. 92.5% of the information comes from AlmaLaurea administrative statistical archives (certified data by the university where the previous qualification was achieved) and 7.5% comes from the questionnaire filled in by graduates. "AFAM degree", "High School for Language Mediators or other course issuing a title equivalent to graduation" are not shown.

#### University of the previous degree

The indicator is calculated only for second-level degree graduates who have previously achieved a first level Italian degree. 97.3% of the information comes from AlmaLaurea administrative statistical archives (certified data by the university where the previous qualification was achieved) and 2.7% comes from the questionnaire filled in by graduates. "Italian Telematic University" is not shown.

### Degree completion time of the previous degree

The indicator is calculated only for second-level degree graduates who have previously achieved a first level Italian degree. 97.3% of the information comes from AlmaLaurea administrative statistical archives (certified data by the university where the previous qualification was achieved) and 2.7% comes from the questionnaire filled in by graduates. Degree completion time of the previous degree depends on the date of graduation, the date of enrolment in the degree programme and the normal duration of the previous completed programme, taking into account the degree sessions of the academic year (the third and final session ends on 30th April). For 2.7% for which information on the previous qualification from administrative sources cannot be recovered, the month of achievement of the previous qualification is not available; therefore, those who obtained the degree in the first four months of the year are similar to those who obtained the degree in the following months (for example, those who graduate by April 30th would be "within prescribed degree completion time" but they are attributed to "1 year beyond prescribed degree completion time").

# Graduation mark of the previous degree

The indicator is calculated only for second-level degree graduates who have previously achieved a first level Italian degree. 97.3% of the information comes from AlmaLaurea administrative statistical archives (certified data by the university where the previous qualification was achieved) and 2.7% comes from the questionnaire filled in by graduates. The mark of 110 cum laude was converted to 113. Graduation marks with a base other than 110 or with values lower than 66/110 or higher than 110/110 were excluded.

#### Very important reasons for the choice of degree programme

The variable very important reasons for the choice of degree programme is a summary of the replies given to the two following questions.

"Were the two following reasons important in making your decision to enrol in the course that you are completing?"

Interest in the subjects of the course (cultural reasons)

- Yes, definitely
- More yes than no
- More no than yes
- No, definitely

Interest in the job opportunities provided by the degree programme (job-oriented reasons)

- Yes, definitely
- More yes than no
- More no than yes
- No, definitely

The degree holders who chose their degree programme being driven by both cultural and professional factors replied "Yes, definitely" to both questions. The graduates who were motivated mainly by cultural factors replied "Yes, definitely" only to the question about their interest in the subjects of the degree programme. Similarly, the graduates who were motivated mainly by professional factors replied "Yes, definitely" only to the question about their Interest in the job opportunities provided by the degree programme. Finally, the type of reply "no specific factor" includes students who replied other than "Yes, definitely" to both questions.

# Enrolment age

Graduates having a regular enrolment age are those who entered the university at 19. E.g. a student born in 1993 (or later) who registered in a first-level degree or a single-cycle second-level degree in 2012/13 would be considered as having a regular enrolment age. For second-level degrees, the regular enrolment age is 22 (corresponding to studies that have been completely regular both prior to university and during the first-level degree programme).

#### Exam marks

To calculate exam marks earned, the marks of both 30 and 30 cum laude for single examinations are considered equal to 30. The value corresponds to the average of the scores of the exams taken during the degree programme. It is administrative information communicated by the universities.

#### Graduation mark

The graduation mark is expressed on a scale of 110, even for the students of the Faculty of Engineering of Bologna who enrolled in the programme before the university reform (where marks are assigned on a scale of 100). For calculating averages, the mark of 110 cum laude was converted to 113.

# Degree completion time

The degree completion time depends on the date of graduation, the date of enrolment in the degree programme and the normal duration of the programme, taking into account the degree sessions of the academic year (the third and final session ends on 30th April). Due to the Covid-19 pandemic emergency, Law Decree no. 18 of March 17, 2020, art. 101 paragraph 1 extended the conclusion of the academic year to June 15th. For 2020 graduates, the date considered for the end of the academic year was, therefore, June 15th, 2020 and not April 30th. In the event that the student has changed programme using credits from the previous programme, the date of enrolment remains the same as the original programme. For second-level degree programmes, degree completion time takes into account only the final two years and does not consider any delays in the previous degree programme.

#### **Duration of studies**

The duration of studies, starting with the 2019 graduates, is the length of time elapsed between the conventional date of 1st October of the year of enrolment (not anymore 5th November as for the previous surveys) and the date of graduation. For second-level degrees it is the interval between 1st October of the year of enrolment in the final two-year period and the date of graduation. Please note that for the particular case of the single-cycle second-level degree programme in Dentistry and orthodontics, when analysing the graduates of Ministerial Decrees no. 509/1999 and no. 270/2004 at the same time the different durations of the degree programmes (5 years for the 509 graduates and 6 years for those 270) must be considered.

# Graduation delay

The graduation delay is the "irregular" part of academic studies beyond the standard time (for second-level degrees, the "irregular" part of the final two years). Graduation delay is therefore equal to the difference between the duration of studies (total time spent to earn the degree) and the prescribed duration of studies. Starting with 2019 graduates, the delay can take negative values in two cases: when students complete the degree programmes before prescribed degree completion time and when students graduate in the first academic year available based on the prescribed duration of the degree programme, but before the date of 1st October.

# Graduation delay index

The graduation delay index is the ratio between graduation delay and prescribed duration of the degree programme. The prescribed duration is conventionally equal to 3 years for first-level degree programmes, 2 years for second-level degree programmes, 5 or 6 years for single-cycle second-level degree programmes, except for the rare cases of extension of programmes established by the universities.

# Had work experience

Studying workers are graduates who stated that they had continuous full-time work for at least half the duration of their studies both during the academic classes and during breaks. Working students are all the other graduates who have worked during their university studies.

# Would enrol again at university?

The possible answers to the question "If you had to do it again, would you enrol again at any university?" depend on the degree programme type that has been completed.

First-level degree holders, single-cycle second-level and prereform degree holders:

"If you had to do it again, would you enrol again at any university?"

- Yes, in the same programme of this university
- Yes, but in another programme of this university
- Yes, in the same programme but at another university
- Yes, but in a different course of study and at another university
- No, I would not enrol again at any university.

# Second-level degree holders:

"If you had to do it again, would you enrol again in any second-level degree programme?"

- Yes, in the same second-level degree programme of this university
- Yes, but in another second-level degree programme of this university
- Yes, in the same second-level degree programme but at another university
- Yes, but in a different second-level degree course of study and at another university
- No, I would not enrol again in any second-level degree programme.

# Foreign languages: "at least B2" skills

Graduates with a level of "at least B2" skills of foreign languages are those who have declared that they have a level B2, C1 or C2 skills (both for written and spoken knowledge). The classification refers to the Common European Framework of Reference for the knowledge of languages (CEFR), which provides six levels of competence: A1, A2, B1, B2, C1, C2. For a detailed description of the knowledge levels <a href="https://www.languagepoint.eu/pagina.asp?c\_Page=57&c\_Template=1&c\_SubCat=48&c\_Cat=8&d\_Page=Tabella%20livelli%20QCER">https://www.languagepoint.eu/pagina.asp?c\_Page=57&c\_Template=1&c\_SubCat=48&c\_Cat=8&d\_Page=Tabella%20livelli%20QCER</a>.

The information, visible starting with 2019 graduates, is collected starting with 2018 survey questionnaire, therefore for graduates who completed the previous versions of the questionnaire the information is not available.

# IT tools: "at least good" skills

Among degree holders who have "at least good" IT skills, many of them replied that they have a "very good" or "good" skills within a range of entries including also "fairly good", "limited" and "no skills at all". Each item about IT skills is described through some practical examples to make simple the filling out of the questionnaire. From the 2015 survey some examples were introduced where not present and in 2020 the item "assisted design" has been modified; when comparing data with the results of previous years, therefore, it is necessary to take into account these changes.

Below there are some examples for each item:

- Internet surfing and communications (e-mail, blogs, forums, social networks, ...).
- Word processor (Microsoft Word, Writer, StarOffice, ...). Until 2014 the example was "word processing".
- Spreadsheets (Excel, etc.).
- Presentation tools (PowerPoint, Keynote, Impress, ...).
- Operating systems (Windows, Unix, Mac OS, Android, iOS, ...). Examples introduced in 2015.
- Programming languages (C++, C#, Java, Javascript, ...). Examples introduced in 2015.
- Data bases (Oracle, SQL server, Access, ...).
- Web-site creation (HTML, CSS, PHP, ASP.NET, ...). Examples introduced in 2015.
- Data transmission networks (network protocols, technologies, ...). Examples introduced in 2015.
- Assisted design (CAD 2D/CAD 3D, ...). Until 2019 the example was "CAD/CAM/CAE".

Plan to pursue postgraduate studies with an Academic Diploma of an Higher education institution for fine arts, musical and choreographic studies

Between graduates that plan to pursue postgraduate studies with an Academic Diploma of an Higher education institution for fine arts, musical and choreographic studies (AFAM) are included graduates who wish to continue their studies with a first-level, second-level or research Academic Diploma of an Higher education institution for fine arts, musical and choreographic studies.

# Main reason of enrolment in a second-level degree programme

The indicator is calculated only for first-level degree graduates who intend to continue their university studies by enrolling in a second-level degree programme. "Other reasons" is not shown.

# University of the next enrolment

The indicator is calculated only for first-level degree graduates who intend to continue their university studies by enrolling in a second-level degree programme. "Italian Telematic University" is not shown.

Willingness to work by "a tutele crescenti" labour contract

It is a contract introduced by Italy's Jobs Act and available starting from 7th March 2015 (according to the Legislative Decree No. 23 of 4th March 2015).