

Methodological Notes

The **2015 Graduate Profile** is based on the combination of the following sets of data:

- administrative records of the 71 universities which became members of the AlmaLaurea before 2015;
- replies to the questionnaires AlmaLaurea administered.

Some categories of graduates were excluded from the population analysed in the 2015 Profile since they gained their university qualification as a result of special arrangements. They amount to 1,795 graduates from 54 universities: they are 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 courses that had been specifically designed for them. What is more, often these graduates do not complete the AlmaLaurea questionnaire.

The Report analyses degree holders of post-reform university courses (that were implemented by the Ministerial Decrees 509/99 and 270/04) and pre-reform degree holders.

**Tab. 1 – Graduates surveyed in 2015 Profile
for type of degree course**

Type of Degree Course	Number of graduates surveyed in <i>2015 Profile</i>
FIRST LEVEL OR THREE YEAR DEGREES (post-reform)	153,815
SINGLE-CYCLE SPECIALIST (OR MASTER'S) DEGREES (post-reform)	31,502
MASTER'S (OR SECOND LEVEL) DEGREE (post-reform)	76,634
NON-REFORMED DEGREE COURSE (SCIENCES OF PRIMARY EDUCATION)	1,979
PRE-REFORM DEGREES	2,812
TOTAL	266,742

Tab. 2 – Graduates surveyed in 2015 Profile for university

university	graduates surveyed in 2015 Profile	university	graduates surveyed in 2015 Profile
Roma La Sapienza	18,119	Bergamo	2,809
Bologna	16,731	Brescia	2,457
Napoli Federico II	12,906	Urbino	2,312
Torino	11,598	Napoli Parthenope	2,170
Padova	11,593	Sassari	2,086
Milano	10,830	Piemonte Orientale	1,765
Firenze	7,930	Macerata	1,619
Palermo	7,876	Bari Politecnico	1,619
Bari	7,251	Napoli L'Orientale	1,605
Catania	6,785	Insubria Varese-Como	1,513
Pisa	6,770	Foggia	1,449
Milano Bicocca	6,454	Venezia IUAV	1,418
Torino Politecnico	6,250	Cassino e Lazio Meridionale	1,417
Roma Tre	6,079	Viterbo Tuscia	1,299
Genova	5,906	Roma LUMSA	1,230
Roma Tor Vergata	5,468	Camerino	1,197
Chieti e Pescara	5,327	Milano IULM	1,133
Parma	4,776	Catanzaro	1,118
Salerno	4,661	Enna Kore	1,046
Venezia Ca' Foscari	4,650	Reggio Calabria	1,028
Pavia	4,561	Molise	1,012
Calabria	4,511	Teramo	977
Perugia	4,486	Sannio	924
Napoli Seconda Università	4,433	Basilicata	844
Verona	4,414	LIUC Castellanza	535
Messina	4,324	Roma Foro Italico	469
Cagliari	3,888	Bolzano	452
Modena e Reggio Emilia	3,779	Milano San Raffaele	443
Trento	3,521	Roma Campus Bio- Medico	346
Salento	3,266	Roma UNINT	340
Trieste	3,200	LUM Casamassima	320
Marche Politecnica	3,086	Perugia Stranieri	228
Ferrara	2,995	Siena Stranieri	220
L'Aquila	2,929	Valle d'Aosta	183
Siena	2,895	Scienze Gastronomiche Bra	71
Udine	2,840		
TOTALE			266,742

Sources and reference populations

The documentation analysed here takes into account the following groups:

- **all** degree holders (266,742), in terms of ***Personal Details, Secondary School Performances, Academic Performances at University*** (with the exception of *previous university experiences* and *motivations for choosing a degree course*). 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 grades* (when grades were missing in the university records they were retrieved through the questionnaire);
- all degree holders **who filled and returned the questionnaire** (235,992, that is 88.5% of the target population), as regards the sections ***Social background, Study Situation, Working Activities during University Studies, Assessment of University Experience, Foreign Languages and IT skills, Further Education Prospects, Employment Prospects*** and for *previous university experiences and motivations for choosing a degree course* (***Academic Performances at University*** section).

The 2015 Graduate Profile Report

The 2015 Graduate Profile Report is available in digital format at the Internet address www.almalaurea.it/universita/profilo/profilo2015/. It includes relevant documents for all graduate groups, which can be identified

by **degree course type, university, faculty, degree subject grouping, degree-course grouping**¹ and **course type**².

The *Graduate Profile* shows data for groups including at least 5 graduates.

Return rate of questionnaires

The overall number of graduates and the number of those who filled the questionnaire are reported in each sheet and can be viewed in the Profile. The overall return rate was 88.5%³ in 2015. Whenever the graduates who filled the questionnaire are less than 60% of the overall number, a note will appear inviting users to be especially careful in the interpretation of the documentation gathered from the questionnaires.

Graduates whose questionnaires present the following limits were omitted from the 2015 Profile analyses:

¹ From the 2014 graduates, degree course grouping in geography (L-6, 30) and in geographical sciences (LM-80, 21/S) are in the disciplinary group "literary" and no longer in the "geo-biological".

² The variable uses the codes of the databank containing information on the supply of study opportunities: to each degree course activated in a given university (or sometimes even in a given city) is associated a univocal code, which do not allows aggregations of different universities. In some cases a degree course activated by a given university may change its identification code, although its name may remain the same. This may happen, for example, as a consequence of changes made to the subjects of the degree course or of a change of the degree course grouping in which the course is included and so on. In such cases the same courses are treated separately, since the codes they have are different. In order to facilitate the finding of such particular cases, next to the name of the course has been indicated the academic year up to which the course was still active (e.g. "up to the academic year...") or the academic year in which the course was started ("from the academic year ..."); in other cases the location of studies was specified. It is also possible that a course has changed its name while not changing its Off.F. code. If the course includes one or more courses with significantly different denomination from the most recent one, next to that name course is given also the oldest one, preceded by "già".

³ The lowering of the overall return rate compared to previous years (around 92%) is mainly due to the late activation of the filling out of the questionnaire by some universities, which took place in the months of February and March 2015.

- insufficient degree of completion: the questionnaires were empty or too few questions were answered;
- inconsistency: graduates supplied contradictory answers;
- 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 "not specified" category, percentage values and absolute values

The *Graduate Profile* includes the percentage distribution of graduate groups for each variable. For the sake of clarity, the percentage related to the "not specified" (or "not available") category, which are usually quite low⁴, are not been reported in the tables. Consequently, the sum of visible percentages may be less than 100.

The percentages lower than 3% or relating to the "not-specified"/"not-available" type of reply have not been reported in the charts.

Empty cells

Empty cells in the tables, which are identified by the symbol "-", mean that the corresponding number of graduates is zero (in terms of percentage) or that the phenomenon has no valid cases (if the cell is supposed to display average values). Consequently, the percentage value "0.0" indicates that they are valid cases, but with a percentage that is lower than 0.05. All values are represented with only one decimal figure.

⁴ For the reasons expressed in the previous note, sometimes the university of Milano, Palermo, Pavia, Brescia and Pisa have "not specified" with not negligible values.

Reference to the notes

For the definition of the following variables, the tables refer to the methodological notes.

- The **average age at graduation** is calculated not only on the basis of the actual age in whole years but also by taking into account specific birth and graduation dates. For the percentage distributions by age at graduation, the age is to be intended as fully achieved.
- The figure indicating **foreign citizens** does not include graduates from the Republic of San Marino.
- 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 *middle class*, *clerical middle class*, *lower middle class* and *working class*. The middle 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.

last job position	socio-economic status
<ul style="list-style-type: none"> • liberal professionals * • high level managers • entrepreneurs with at least 15 employees 	middle class
<ul style="list-style-type: none"> • employees with coordinating duties • white collar employees • middle managers • teachers (excluded university teachers) 	clerical middle class
<ul style="list-style-type: none"> • self-employed • assistants in family business • members of cooperatives • entrepreneurs with less than 15 employees 	lower middle class
<ul style="list-style-type: none"> • manual workers, subordinates, etc. • low-level office workers 	working class

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

Graduates whose mother (or father) is a house-keeper belong to the social class of the working parent (either father or mother).

- The **high-school graduation grade** (tables report average values) is calculated for qualifications earned in Italy and graded on a scale from 1 to 100, even for students who finished school before 1999 and were graded on a scale from 1 to 60.
- As regards **Area of upper secondary diploma**, the categories "In the South, but degree earned in the North or Central Italy", "in Central Italy, but degree earned in the North or the South" and "in the North, but degree earned in the South or Central Italy" do not include individuals who earned their upper secondary diploma in a province that borders on the province where they earned their university degrees.
- In the question about **previous university experiences**, master's degree holders are asked to replay by mentioning the

graduation certification that gave them access to the master's degree course.

- The variable **major motivations for choosing the type of degree course** is a summary of the replies given to the two following questions.

When you decided to enrol at the university degree course you are about to complete now, which of the following motivations influenced you more?

Interest in the course curriculum (mainly cultural factors)

- Definitely yes
- More yes than no
- More no than yes
- Definitely not

Interest in the job opportunities the course provides for (mainly employment factors)

- Definitely yes
- More yes than no
- More no than yes
- Definitely not

The degree holders who chose their course being driven by both cultural and employment factors replied "Definitely yes" to both questions. The graduates who were motivated mainly by cultural factors replied "Definitely yes" only to the question about their interest in the course curricular teachings. Similarly, the graduates who were motivated mainly by employment factors replied "Definitely yes" only to the question about their interest in the job opportunities provided for by the course. Finally, the type of reply "neither these nor those" includes students who replied other than "Definitely yes" to both questions.

- Degree holders with **standard enrolment age** are defined as those who entered the university when they were 19. For instance, a student who was born in 1988 (or later) and enrolled in a first-level or a single-cycle degree course in 2007/08 is to be considered having the standard age at enrolment. For **master's degree courses**, the standard age at enrolment has

been set at 22 (on the assumption of totally regular educational careers both in secondary school and at university).

- As for the **individual examination grades**, both 30/30 and 30/30 with distinction have the same value (30).
- The **degree grade** is expressed on a scale from 1 to 110 even for pre-reform graduates of the Faculty of Engineering of the University of Bologna (where grades were expressed on a scale from 1 to 100). The highest grade, 110 with distinction, has been set equal to 113 for the purposes of calculating averages.
- **Time-to-graduation** is to be referred to courses completed in 2015; for master's degrees only the two years pertaining to the master's programme alone are taken into consideration.
- The **duration of university studies** of each degree holder is given by the time interval between the conventional date of November 5th of the enrolment year and the graduation year. For master's degree courses, the time interval is calculated between November 5th of the enrolment year for the two-year final course and the graduation date.
- **Delay in graduation** of a degree holder is the extra time necessary to complete the course beyond its prescribed duration (for master's degree courses, it is the extra time needed beyond two years), and it takes into account the number of months and days passed between the completion of the university year (April 30th) and the graduation date.
- The **delay in graduation index** is the ratio between graduation delay time and prescribed duration of the degree course.

- **Student-workers** are degree holders who state they had a full time job for at least half of their university career, regardless of their overlap with classes. **Working students** are degree holders who had some work experiences during their university studies.

- The possible answers to the question “**Would you enrol on the university again?**” depend on the type of programme that has been completed.

First-level degree holders, single-cycle and pre-reform specialist degree holders

If you could go back in time, would you enrol on university again?

- *yes, in the same degree course at the same university*
- *yes, in a different degree course at the same university*
- *yes, in the same degree course at another university*
- *yes, but in a different degree course at another university*
- *no, I would not enrol again at any university.*

Master’s degree holders

If you could go back in time, would you enrol on university again?

- *yes, in the same degree course at the same university*
- *yes, in a different degree course at the same university*
- *yes, in the same degree course at another university*
- *yes, but in a different degree course at another university*
- *no, I would not enrol again at any university.*

- The group of graduates intending to continue their studies with an academic degree (**Higher Artistic or Musical Training**) includes individuals who wish to earn a first- or second-level academic diploma or a research training qualification.

Other special classification patterns

Place of residence is broken down into the following categories:

- Same province of the attended university;
- Other province of the same region;
- Different region;
- Abroad.

This classification takes into account the province in which teaching activities are based, regardless of the province in which the university has its main headquarters.

- As for the variable **educational qualification of degree holders' parents**, the parent with the higher qualification was taken into account and a distinction was made between situations where both parents, or only one, is a university graduate.

- Degree holders who have at least a "good" **knowledge of foreign languages** "native speakers", or claim to have a "very good" or "good" level of knowledge within a range of entries including also "fairly good", "limited" and "no knowledge at all" (both in writing and speaking).

- Among degree holders who have at least a "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; when comparing the 2015 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, ...).
Untill 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;
- multimedia (sound, image and video processing);

- 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;

- CAD/CAM/CAE - assisted design.

- The Min. Decree (MD) 270/04 reorganised the degree course groups, which had been introduced by the Min. Decree 509/99, and it also matched the new degree-course groups (MD 270) with the old ones (MD 509). The two types of postgraduate degrees were divided into "single-cycle specialist degree courses" and "master's degrees", and they were changed names. The post-reform 2015 graduates belong mostly to MD 270 courses. In the Graduate Profile Report, the distinction between graduates under the MD 509 and MD 270 courses will not be taken into account.