

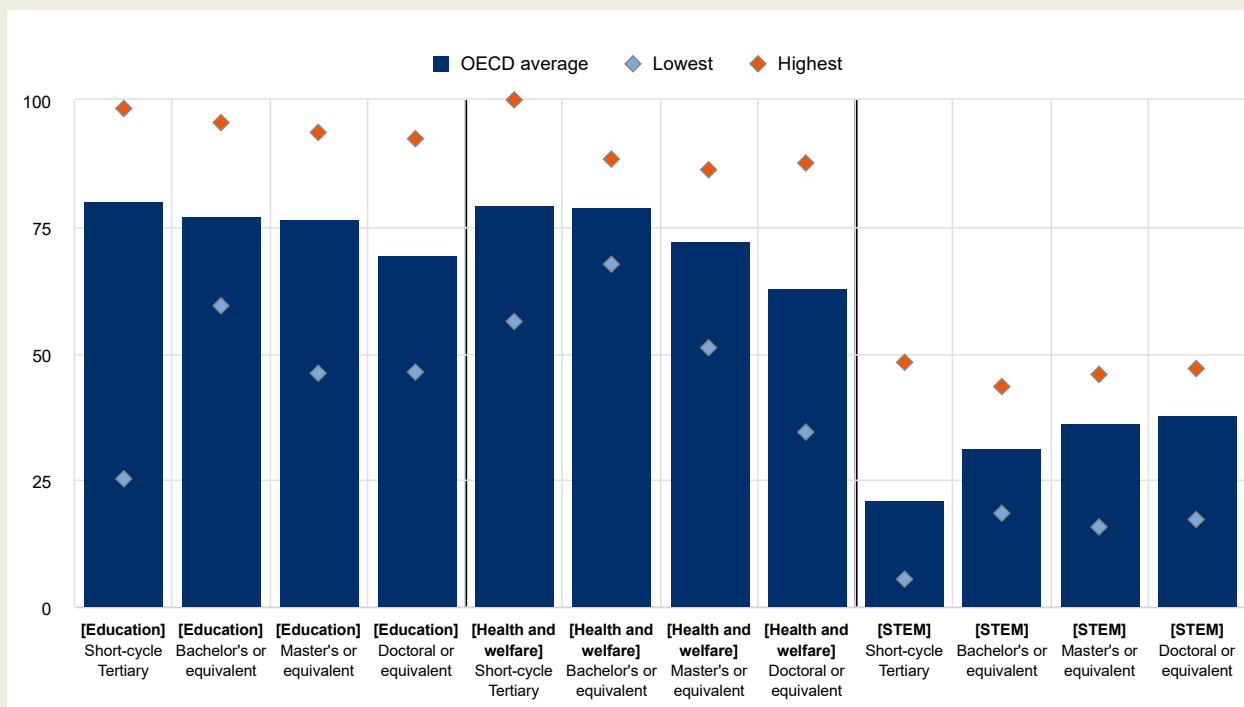
# Indicator B4. Who is expected to enter tertiary education?

## Highlights

- On average across OECD countries, women are under-represented in science, technology, engineering and mathematics (STEM) fields of study and over-represented in the fields of health and welfare and education across all tertiary levels.
- Despite the clear need for information and communication technologies (ICT) skills, as highlighted by the pandemic, the field of ICT continues to attract a small share of students: only 6% of new entrants to tertiary programmes were ICT students on average across OECD countries in 2020.
- In contrast to lower levels of tertiary education, doctoral candidates tend to specialise heavily in STEM-related fields of study: 38% of new doctoral entrants chose STEM fields on average across OECD countries in 2020.


**Figure B4.1. Share of women among new entrants to tertiary education, by level of education and selected fields of study (2020)**

In per cent



**Note:** STEM refers to the fields of science, technology, engineering and mathematics.

**Source:** OECD (2022), Tables B4.3. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

StatLink  <https://stat.link/y0r4fx>

## Context

Participation in tertiary education plays an essential role in developing young adults' skills so they contribute fully to society. Yet students' profiles and academic aptitudes can be very diverse, as can the pathways into tertiary education. While it is common in some countries for students to enter tertiary education directly after their upper secondary programme, in others students often postpone entry to higher education, take a gap year or alternate periods of employment with periods of study. Attractive employment opportunities and burgeoning economies have prompted young people in some countries to defer education in favour of learning in the workplace, particularly when financial support for further study is limited. Lifelong learning has also long been envisaged as the guiding policy framework for OECD education systems, enabling individuals to continually update their skills to meet volatile and constantly evolving market demand (OECD, 2001<sup>[1]</sup>).

To address the growing needs of a diverse population, some countries have progressively adapted their tertiary-level programmes to ensure more learning flexibility to suit a wide range of students' skills and learning aptitudes. This includes building more pathways between upper secondary and tertiary programmes, including those with a vocational orientation, and expanding the types of programmes available to first-time tertiary students: short-cycle tertiary programmes, bachelor's programmes or long first degrees at master's level. Flexible entrance criteria can support lifelong learning and second-chance programmes can offer new opportunities to older students who might have dropped out of the education system or for those who wish to develop new skills. Providing a range of educational options adapted to the needs and ambitions of young adults also ensures a smoother transition from education to work.

Analysing how new entrants are distributed among different fields of education allows policy makers to understand how their students are choosing between different professional paths and to plan specific actions to combat future shortages in some professional occupations. The COVID-19 crisis has highlighted the importance of preparing health professionals to provide care when they are most needed, and thereby monitoring the share of students entering health and welfare (often regulated by *numerus clausus* policies), whether these students graduate from the same field of study, and flows of healthcare professionals (OECD, 2016<sup>[2]</sup>). Entrants to doctoral programmes are also of particular interest, as these graduates are often innovating and advancing societal knowledge, something that is fundamental in the knowledge-based societies of the 21<sup>st</sup> century (OECD, 2019<sup>[3]</sup>).

The COVID-19 pandemic had a wide and immediate impact on higher education, forcing institutions to make an urgent transition to distance learning. Higher education institutions and policy makers had to respond immediately to ensure continuity of learning, which led to a dramatic change in the experience of both educators and learners. The extent to which the pandemic has affected entry into tertiary education and international student flows over the 2020/21 academic year is still uncertain. While some countries seem to be facing increases in student numbers, others are facing a drop in enrolment.

## Other findings

- The share of entrants who moved directly from upper secondary to tertiary education without any significant break varies considerably across countries. Over 90% of those who enter bachelor's programmes in the United States do so right after upper secondary education, compared to only 5% of entrants in Israel, where military service at the age of 18 is mandatory.
- The likelihood that students will ultimately follow a different pathway than the one they set out on can differ substantially according to the field of study: less than 50% of bachelor's students who started a full-time course in ICT went on to graduate from the same field, while the share is 74% for health and welfare on average across countries with available data.

## Note

Short-cycle tertiary and master's long first degree (LFD) programmes may not exist or be very rare in a number of educational systems. To ensure relevant cross-country comparisons, the analysis of the distribution of new or first-time entrants by gender, field of study or mobility at these levels of education only includes countries where at least 10% of new or first-time tertiary entrants are enrolled in such programmes.

## Analysis

### Profile of new entrants into tertiary education

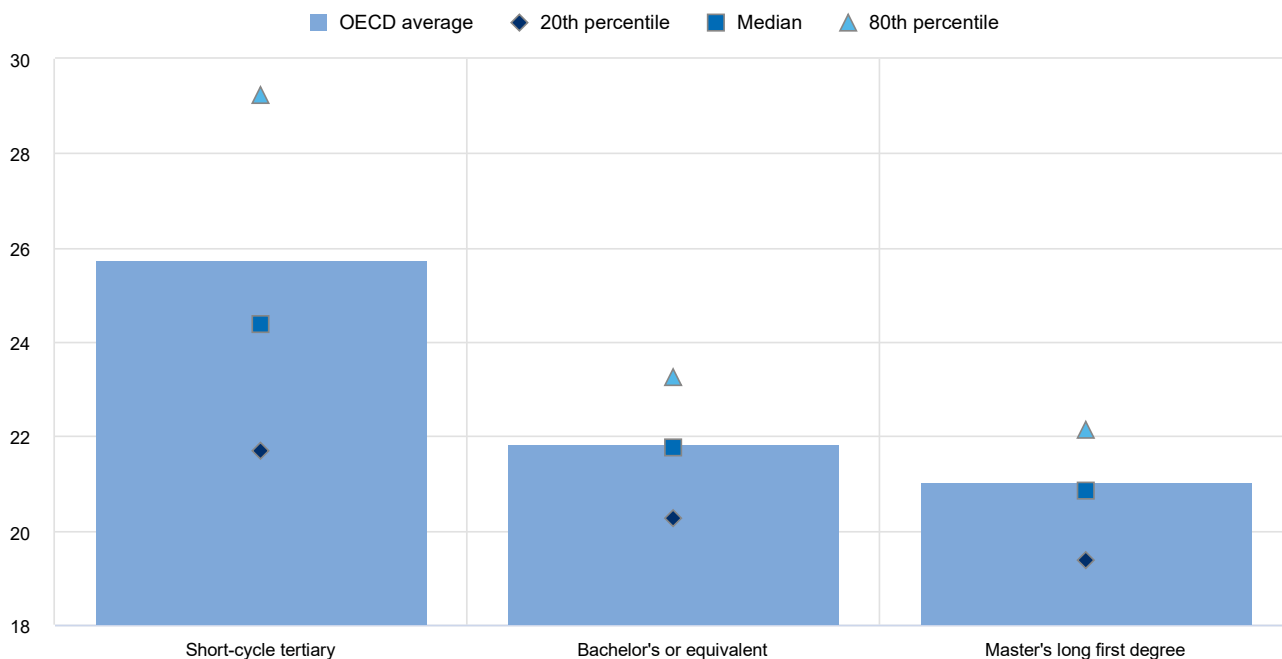
Tertiary education is the most flexible and diverse level of education today with a vast array of programmes on offer, from research-oriented degrees that prepare students for doctoral studies and academia, to professional courses that provide students with practical skills to enter the labour market more directly. Over the past decade, increasing proportions of adult populations across the OECD have attained a tertiary level of education. As a non-compulsory level of education, however, there are a variety of different pathways for those who wish to pursue further education after secondary school and students may engage in other personal or professional activities before their transition to tertiary education (Box B4.1).

#### Age distribution


The average age at entry into tertiary programmes varies depending on the level of the programme and the student profile that it is intended to attract. Students may enter tertiary education at three levels: short-cycle tertiary (ISCED level 5), bachelor's (ISCED level 6) or master's level in long first degree programmes (ISCED level 7 LFD). In 25 out of 34 countries, the average age at entry decreases as the level of education entered increases. On average, students start master's LFDs at the age of 21, although the average age for bachelor's programmes is only slightly higher at 22 years. Meanwhile, the age of new entrants to short-cycle tertiary programmes is considerably higher, averaging 26 years across the OECD (Table B4.1).

**Figure B4.2. Average age dispersion of new entrants, by level of education (2020)**

OECD aggregate data, in years



Source: OECD (2022), Tables B4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

StatLink  <https://stat.link/27m1ty>

However, there are large disparities in the average age of entrants across countries. The average age of new entrants to bachelor's programmes varies from 19 in Belgium, Japan and Korea to 25 in Denmark and Sweden. For students in master's LFD programmes, there is a similar range in average ages from 19 in Chile, Italy, Japan, Portugal, Slovenia and Türkiye to

24 in Switzerland and 26 in Sweden. For short-cycle tertiary programmes, the differences are much wider, varying from 20 years old in France and Mexico to 34 in Ireland and 40 in Poland (Table B4.1).

The higher average age of entry to short-cycle tertiary can be explained by the fact that there are often more students entering adult education programmes at this level than at others. For example, in Denmark, 27% of students in short-cycle tertiary education are enrolled in *Akademiuddannelser*, an adult education programme that requires at least two years of professional experience to enter. In comparison, a much larger share of bachelor's students in Denmark are enrolled in initial education and only 9% are enrolled in an adult education programme, the *Diplomuddannelser*, which also requires at least two years of relevant work experience. Meanwhile in Austria, at bachelor's level there are only initial education programmes, whereas several short-cycle programmes are classified as adult education, such as the *Berufsbildende höhere Schule für Berufstätige* and the *Werkmeister- und Bauhandwerkerschule*.

The spread of ages of new entrants to short-cycle tertiary programmes is also considerably wider than those of new entrants to bachelor's level or master's LFD programmes. In short-cycle tertiary education, the average age of students at the 20<sup>th</sup> percentile was just under 22 years in 2020, compared slightly over 29 years at the 80<sup>th</sup> percentile, a spread of over 8 years. In contrast, the spread of average ages of new entrants to bachelor's programmes was exactly 3 years, while the spread of average ages in master's LFD programmes was slightly under that (Figure B4.2). This reflects the fact that bachelor's and master's LFD programmes tend to be initial education courses, which are designed to be completed before young people's first entry to the labour market.

### Box B4.1. Direct versus delayed entry to tertiary education

The growing flexibility of tertiary educational systems is reflected in the increasing availability of new learning pathways and modalities. Part-time study, online courses and the ability to collect credits without the intention of completing a degree are some examples of how tertiary programmes have been adapting to a vision of education as lifelong learning. In this context, students in many countries may not be expected to follow a direct path from upper secondary to tertiary education.

Figure B4.3 shows the share of entrants to bachelor's programmes who came directly to tertiary education from upper secondary education without any significant break, such as a gap year. This share varies considerably across countries, which highlights the diversity in the pool of tertiary entrants. While over 90% of those who enter bachelor's programmes in the United States do so right after upper secondary education, the same is true for only 5% of entrants in Israel (Figure B4.3).

This diversity reflects important differences in institutional and social factors that are specific to each country. Traditionally, students entered tertiary programmes immediately after completing upper secondary education, and this remains true in many cases. In some countries, however, it is common for students to enter military or civil service immediately after upper secondary education. This is the case in Israel, for example, where military service is compulsory for both men (for 32 months) and women (for 24 months) from the age of 18. In some countries, military service is only compulsory for men. In Austria, for example, all men have to perform military or alternative service straight after upper secondary school, unless they undertake a short-cycle programme in a higher technical and vocational college. Thus, only 20% of Austrian men who entered a bachelor's programme did so directly after upper secondary in 2020, compared to 54% among women, while the share overall is 39% (Figure B4.3).

Students may also be encouraged to take gap years because of highly selective tertiary entrance systems. In Finland, for example, it is common for students to apply several times before being accepted by some tertiary programmes, which explains why less than 30% of students enter higher education directly from upper secondary (see Indicator D6 in *Education at a Glance 2019* (OECD, 2019<sub>[4]</sub>)). As a result, the Finnish government has been actively trying to reduce the number of years between graduation from upper secondary and entry to tertiary education, by placing more importance on upper secondary education leaving certificates and national matriculation examination results in the selection of students for places instead of entrance examinations. In addition, the number of places for entry to tertiary education has been greatly increased in recent years. These measures have increased the share of students who enter tertiary education directly after upper secondary (see Figure B4.3 and *Education at a Glance 2019* (OECD, 2019<sub>[4]</sub>)). By the same token, higher rates of direct entry to tertiary education may reflect more open admissions systems, such as in the Netherlands, where 86% of bachelor's students entered their programme directly after secondary school (Figure B4.3). There are also countries where policies have been put in place to value certain experiences gained during gap years, which can make it easier for students delay entry to tertiary education if they so wish. In Norway, for example, 50% of university places are reserved for students under the age of 21 but students above this age can be awarded bonus points in their university application for military service,

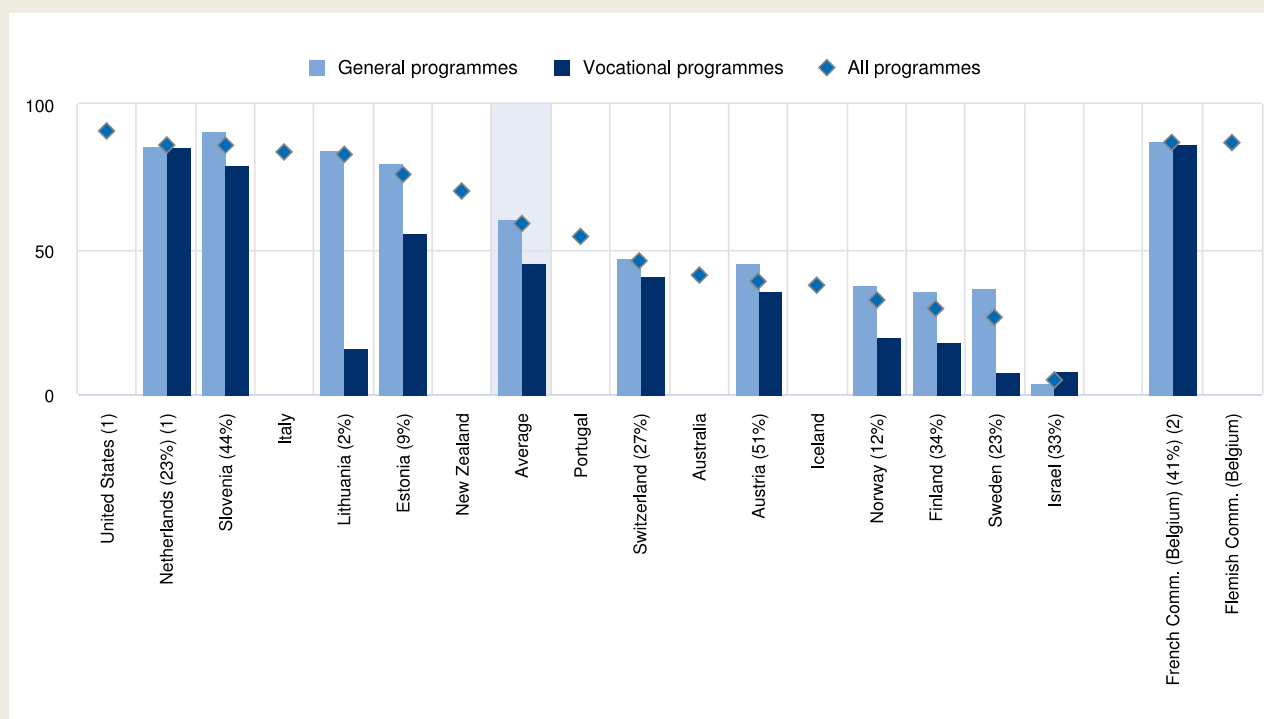
attending folk high school, and their age among other criteria (Vibli, 2022<sup>[5]</sup>). In Lithuania too, applicants to government-funded places in tertiary programmes may benefit from additional grades if they have completed military service or volunteering activities (Table X3.B5.3.)

Entry into tertiary education can also be influenced by students' upper secondary programme orientation. In some countries, entrants coming from vocational upper secondary programmes are considerably more likely to have taken at least one gap year before entering tertiary education than their peers with a general upper secondary degree. In Estonia, Lithuania and Sweden, the difference is over 20 percentage points, although it should be noted that in Estonia and Lithuania upper secondary vocational graduates make up less than 10% of those entering bachelor's programmes. This could reflect the fact that students who complete a vocational upper secondary programme may choose to enter the labour market first, before pursuing tertiary education. It may also be because some vocational upper secondary qualifications require students to take specific exams or supplementary courses before they can access tertiary education. In other countries, bachelor's students with general and vocational upper secondary qualifications are equally likely to have taken gap years before entering the programme. This is the case, for example, in the Flemish and French communities of Belgium and in the Netherlands (Figure B4.3).

It is important, however, to look beyond averages when analysing students' transition from upper secondary to tertiary education. While flexibility and permeability may be important characteristics of education systems, country averages could mask underlying problems faced by disadvantaged students or at-risk groups during this transition period. It is also important to examine students' pathways after entering tertiary education, and how their educational and social background may influence their ability to succeed at this level.

**Figure B4.3. Share of entrants to bachelor's programmes who entered tertiary education directly from upper secondary education, by upper secondary programme orientation (2020)**

In per cent



**Note:** The share of students who graduated from vocational upper secondary programmes are shown in parentheses next to each country name.

1. Year of reference differs from 2020: 2019 in the Netherlands; 2017 in the United States.

2. Data refer only to the *hautes écoles* (HE) and the *écoles des arts* (ESA), representing about 60% of entrants to bachelor's or equivalent programmes.

Countries and other participants are ranked in descending order of the share of entrants who directly entered tertiary education from an upper secondary programme.

**Source:** OECD (2022). See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

### *Fields of study*

A myriad of factors may influence students' future career aspirations and their choice of field of study, including their parents and other role models, careers guidance given in schools, internship experiences and the opportunities available in the labour market (Hofer, Zhivkovikj and Smyth, 2020<sup>[6]</sup>). This choice is highly important as tertiary students gain specialised skills and knowledge, which can open doors to certain career paths. However, once they have started their courses, some students may find that their interests and career objectives are better aligned with a different field of study, and therefore transfer to another field (Box B4.2).

In 2020, approximately one in four new entrants on average across the OECD and across all tertiary levels, chose to study the broad field of business, administration and law. This was the most popular field among new entrants in all OECD countries except Finland (where it was health and welfare), Israel (education), Italy (arts and humanities), and Korea and Sweden (engineering, manufacturing and construction). Some 15% of new entrants to tertiary education enrolled in engineering, manufacturing and construction programmes, and 14% in health and welfare, on average across OECD countries. Around 10% studied arts and humanities, and about the same proportion chose social sciences, journalism and information. Education; natural sciences, mathematics and statistics; ICT; and services each accounted for less than 10% of new entrants on average (Table B4.2).

In all fields, the variation across countries is considerable. In Estonia and Luxembourg, for example, about 10% of new entrants chose ICT, compared to 2% in Italy in 2020. In Israel, the share of entrants starting in the field of education was about 19%, more than twice the OECD average. In Italy, one in five tertiary students enrolled in arts and humanities, while the share was below 5% in Chile, Colombia and Mexico (Table B4.2).

Government action may influence the programmes that institutions choose to offer and the programmes in which students decide to enrol. For example, Estonia has experienced labour-market shortages in the ICT sector in recent years, as well as in specialised education, legal and healthcare professions. As part of its Lifelong Learning Strategy for 2014-2020, Estonia therefore encouraged students to enrol in some fields of study by offering government-funded scholarships for students in teacher education and waiving fees for students in ICT, teacher education and nursing, regardless of their study progress (OECD, 2019<sup>[7]</sup>). Between 2015 and 2020, the share of new entrants enrolling in education programmes in Estonia increased from 6% to 7%, while the share of new entrants to health and welfare increased from 10% to 12%. However, the proportion of new entrants enrolling in these two fields was still below the OECD average in 2020. The share of new entrants to ICT increased from 9% to 10% over the same period.

The COVID-19 crisis has led to some global shifts in the importance placed on certain fields. For example, the pandemic highlighted the overwhelming need to foster the acquisition and development of digital skills and it is likely that the ability to adapt and innovate ICT systems will only increase in importance in the next few decades. However, the field of ICT only attracts a small share of students. On average across OECD countries and across all tertiary levels, 6% of new entrants enrolled in ICT in 2020, representing only a small increase compared to the 5% of new entrants in 2015 (Table B4.2). This is somewhat surprising given that ICT is one of the fields of study offering the greatest benefits in terms of employment (see Indicator A3) and earnings (see Indicator A4). Moreover, in some contexts, the strong demand for ICT skills means that students are able to enter the labour market without fully completing their degree (Box B4.2).

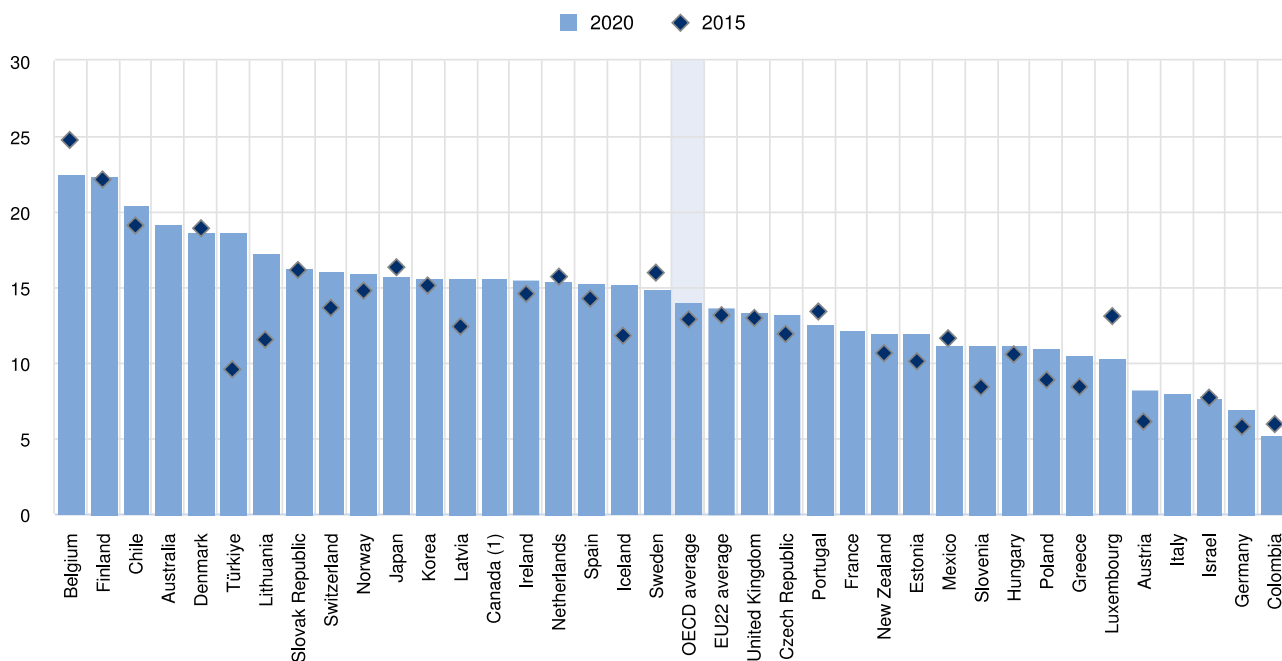
The pandemic has also highlighted the need for robust health services for countries to be able to tackle any subsequent health crises, as well as manage future challenges linked to ageing populations. Policy makers therefore have an interest in ensuring that enough students are entering the relevant fields of study. Health and welfare tertiary graduates enjoy high employment rates, although they vary substantially across countries, from 77% in Mexico to 95% in Iceland (See Indicator A3). In 19 of the 32 countries with available data the share of new entrants to the fields of health and welfare increased between 2015 and 2020. The greatest change was observed in Türkiye, where there was a 9 percentage point increase. At the other end of the scale, the share of new entrants in health and welfare fell in Colombia by 1 percentage point, meaning that only 5% of new entrants enrolled in this field in 2020, the lowest share across OECD countries. Over the same period, the share of new entrants into the field of health and welfare decreased by 3% in Luxembourg (from 13% in 2015 to 10% in 2020) whereas in Belgium, the share decreased by 2 percentage points over this period, but already made up one-quarter (25%) of new entrants in 2015 (Figure B4.4).

The fields of study aggregated under health and welfare include a wide range of programmes: dental studies, medicine, nursing and midwifery, medical diagnostic and treatment technology, therapy and rehabilitation, pharmacy, etc. Some of these programmes, such as dental studies and medicine, require extensive studies and are exclusively offered through master's long first degrees, while others, such as nursing or welfare, are more variable in length. Variations in the overall share of new

entrants in health and welfare programmes might not be enough to observe differences between specific programmes across countries. For example, Latvia and Switzerland recorded 3 and 2 percentage point increases respectively in the share of health and welfare new entrants between 2015 and 2020 (Table B4.2). However, the share of new entrants enrolling in medicine increased by 2 percentage points in Latvia compared to just 1 percentage point in Switzerland. Meanwhile, the share of new entrants enrolling in nursing and midwifery stayed the same in Latvia, but increased in Switzerland by 1 percentage point (see *Education at a Glance Database*).

**Figure B4.4. Share of tertiary new entrants in the field of health and welfare (2015 and 2020)**

In per cent



**Note:** Readers may view data for ICT through the Compare function and in the StatLinks.

1. Year of reference 2019.

Countries are ranked in descending order of the share of health and welfare new entrants among all tertiary new entrants in 2020.

**Source:** OECD (2022), Tables B4.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

StatLink  <https://stat.link/srkib9>

### Fields of study, by level of education and gender

Entry patterns by field of study reveal a strong gender bias. Although the share of women among new entrants to tertiary education has now overtaken that of men, on average across OECD countries, women are still under-represented in STEM fields and over-represented in health and welfare and education across all tertiary levels. However, these gender differences vary across educational levels and there is greater gender equality among new entrants into higher levels of education (Figure B4.1).

On average across OECD countries in 2020, 21% of new entrants to STEM short-cycle tertiary programmes were women, rising to 31% at bachelor's level. Master's and doctoral STEM programmes are slightly closer to gender parity across OECD countries, with women averaging 36% of new entrants at master's level and 38% at doctoral level. Within these overall figures, the share of women ranges from 17% in Japan to 44% in Estonia, Israel, New Zealand and Portugal and 47% in Türkiye at doctoral level, and from 16% in Japan to 44% in Greece and Iceland and 46% in Poland at master's level (Table B4.3).



At the other end of the spectrum, women outnumber men in other fields of study such as health and welfare, although this imbalance also tends to decrease with each additional educational level: women represent 79% of new entrants to health and welfare programmes in short-cycle tertiary and bachelor's level, compared to 72% at master's level and 63% at doctoral level on average across OECD countries (Table B4.3).

A similar pattern of female over-representation is found in the healthcare workforce, where women make up 70% of all health and care staff, putting them at the forefront of the COVID-19 pandemic. Their contribution during the COVID-19 pandemic as essential workers was particularly important, exposing them to a severe risk of infection, while they were under-represented in leadership and decision making processes in the healthcare sector (OECD, 2020<sup>[8]</sup>). Pre-existing shortages of nurses were exacerbated during the COVID-19 pandemic, because many nurses themselves became infected by the virus (OECD/European Union, 2020<sup>[9]</sup>).

In 2020, women were also still largely over-represented among new entrants in the field of education, where they represented 78% of new entrants on average across OECD countries. The share of women ranges from 61% in Colombia and 62% in Türkiye to 90% in Latvia and 93% in Italy (see *Education at a Glance Database*).

### Box B4.2. Pathways through tertiary education by field of study

The likelihood that students will graduate from their programme, transfer to a different field of study, or leave tertiary education without graduating varies across education systems. These outcomes can be influenced by the structure of education systems as a whole, such as their selectivity or flexibility at tertiary level, as well as the characteristics of higher education institutions and individual students (European Commission, 2015<sup>[10]</sup>). Even within the same country context, the likelihood that students will follow different pathways can differ considerably according to the field of study that they choose to enter.

For example, in 2020, the share of bachelor's students who graduated from the same field of study after starting a full-time course in ICT (by the end of the theoretical duration of their programme plus three years) was less than 50% on average across countries and other participants with available data in 2020 (Figure B4.5). This was relatively low compared to other fields, like education (66%), or health and welfare (74%) (Figure B4.5). Most students who did not complete the bachelor's programme they had started within this timeframe were no longer in tertiary education. The share of such students was much higher on average for students who had entered full-time ICT programmes (29% of those who started) than students who entered education programmes (19%) or health and welfare (15%). Some, however, were still continuing their tertiary studies. This was especially the case for ICT programmes, where 14% of students had not yet graduated but were still in education three years after the theoretical end of their programme. In contrast, only 7% of students entering education programmes, and 6% of those entering health and welfare, were in a similar situation.

There were also some differences across fields of study regarding the share of students who graduated from a different field after transferring within the same level of education. For example, 7% of students entered an ICT bachelor's programme but graduated from a bachelor's in another field, on average across countries and other participants with available data. This was more than double the share among students who entered a health and welfare programme (3%). However, the share of students who graduated after transferring to a different level (whether short-cycle tertiary or master's LFD) was generally low (less than 5%) across all fields.

These differences between fields can be partially explained by the labour-market opportunities available, based on demand from employers and the supply of workers with relevant skills. In Norway, for example, it is fairly common for employers to accept partial qualifications in ICT due to the overall shortage of graduates with relevant qualifications. This may explain why higher proportions of ICT students (29%) leave a bachelor's programme without completing a degree than education students (19%) and health and welfare students (15%) (Figure B4.5). This may change if increasing shares of students enter the field of ICT and the supply of workers with relevant skills increases, but in most countries the share of students entering ICT programmes is still relatively low (Table B4.2).

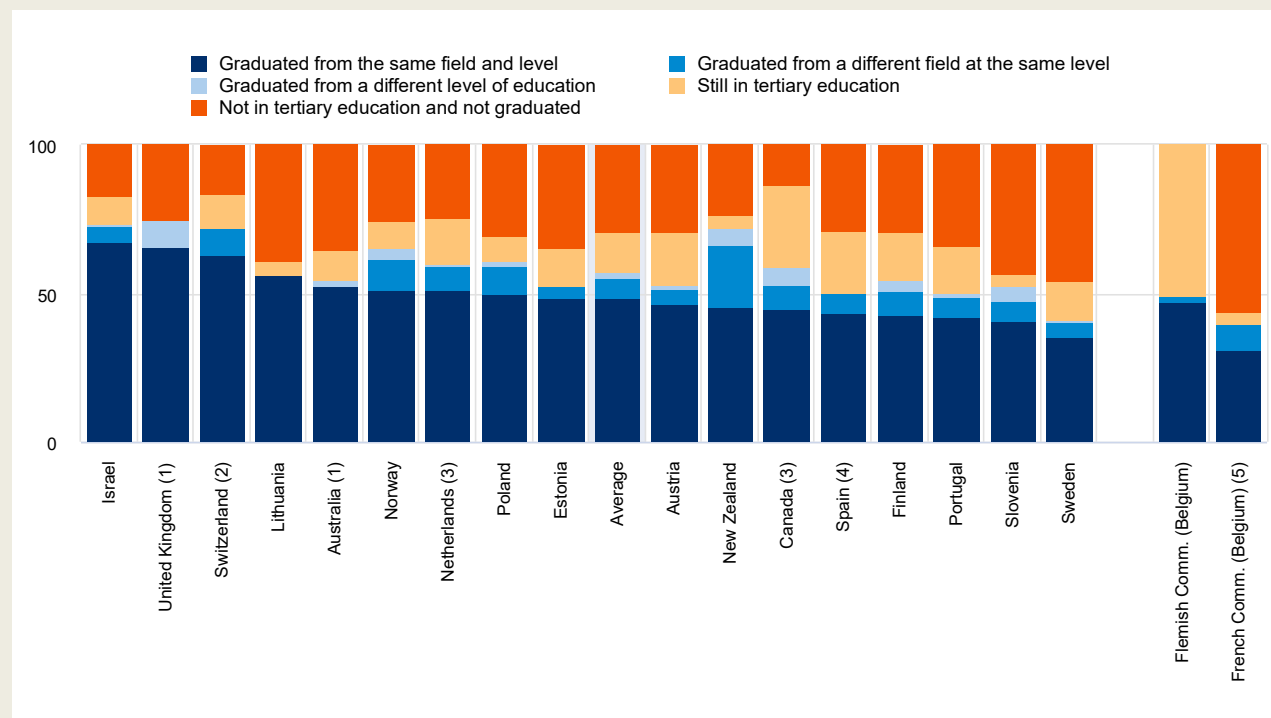
Regulations on the qualifications required to enter certain professions, and the share of students in programmes that are oriented towards such professions, can also contribute to the differences between fields of study. For example, in Estonia, teachers are required to hold a teaching degree (OECD, 2016<sup>[11]</sup>). Given that a high proportion of students in the field of education are enrolled in such teacher training programmes in Estonia (80% in 2020) (see *Education at a Glance Database*), it is perhaps unsurprising that large shares of these students complete their degrees within the same field and



level (over 70%), as these programmes were selected to meet a specific career entry requirement (Figure B4.5). In contrast, a much smaller proportion of students enrolled in the field of education in Poland are registered in specific teacher training programmes (55% in 2020), which is reflected in the smaller share of students in education programmes who graduate from the same field and level (62%).

**Figure B4.5. Status of full-time bachelor's students by the theoretical duration plus three years in selected fields of study at entry (2020)**

ICT, in per cent



**Notes:** Readers may view data for education and health and welfare through the Compare function and in the StatLinks. Students graduating at a different level may have also changed to a different field. The year of reference for the data (2020) corresponds to the graduation year three years after the theoretical end of the programme (2017). The reference year for the entrance cohort changes depending on the duration of programmes.

1. Data refers only to programmes with a theoretical duration of 3, 4, or 5 years in Australia. Only programmes with a theoretical duration of 3 or 4 years are included for the United Kingdom.

2. Data on graduation in the same field and level includes students who graduated from a master's long first degree programme.

3. Year of reference differs from 2020: 2019 in Canada and the Netherlands. Timeframe of reference differs in Canada, where data is provided for the theoretical duration of the programme plus one year (not three years).

4. Data excludes graduation from short-cycle tertiary.

5. Data refers only to the *hautes écoles* (HE) and the *écoles des arts* (ESA), representing about 60% of entrants to bachelor's or equivalent programmes.

Countries are ranked in descending order of the share of students who graduated from the same field and level as entry.

**Source:** OECD (2022). See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

StatLink  <https://stat.link/awe8bh>

## Profile of new entrants into doctoral studies

A doctorate is the highest degree awarded in academia. Doctoral studies play an important role in developing future innovation by training the researchers needed to advance knowledge and explore new research areas relevant for the economy and society of tomorrow. Given the high level of investment in terms of personal and financial resources and the pivotal role of doctorate holders in pushing back the frontiers of knowledge, there has been growing policy interest in attracting talented young people into careers in research, ensuring equitable access to doctoral programmes for both men and women, and providing rewarding employment opportunities to its graduates (OECD, 2019<sub>[7]</sub>).

Doctorate holders account for a small proportion of the adult population. In 2021, just 1.3% of 25-64 year-olds held a doctorate or equivalent qualification on average across OECD countries, though this varied from 0.1% or less in Costa Rica, Indonesia and Mexico to more than 3% in India, Slovenia and Switzerland (See Indicator A1). In addition to these low levels, the number of new entrants to doctoral level studies has been decreasing in the past few years. Between 2013 and 2020, the number of new entrants to this level decreased by approximately 4% across OECD countries with available data for both years, reaching less than 330,000 students in 2020. This trend is primarily driven by substantial decreases in the number of new entrants in Poland (-77%) and the Slovak Republic (-26%) since 2013 (see *Education at a Glance Database*).

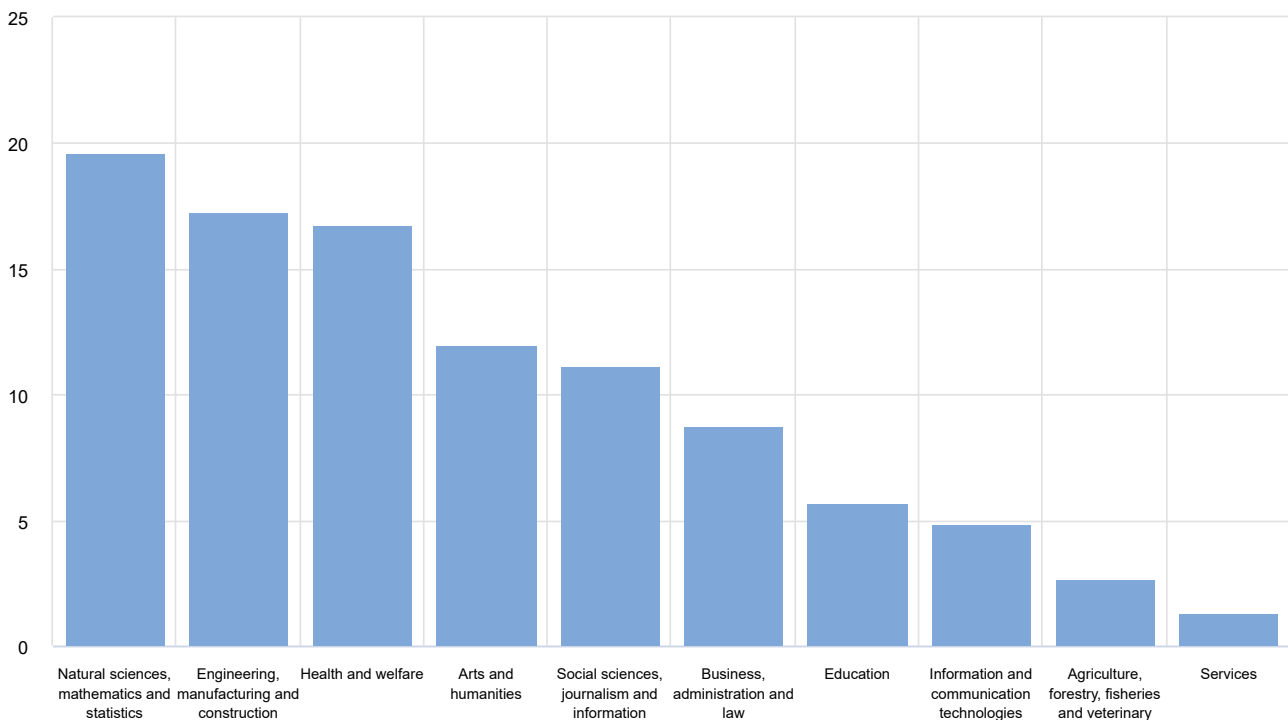
### Age distribution

Admission to doctoral studies is generally on the basis of a master's degree or an equivalent qualification in most countries. However, in some countries, such as Australia, Colombia and the United States, students may enter a doctoral programme following the completion of a bachelor's programme, although in Australia an honours component is additionally required (Class I or IIA) (OECD, 2019<sup>[7]</sup>). The median age at entry to doctoral programmes is 29 on average across OECD countries with at least 60% of entrants between the ages of 26 and 37 (Table B4.4).

The age distribution of new entrants to doctoral programmes provides insights into the diversity of entrants, in terms of age. In some countries, the age distribution is closely centred on the median, implying relatively small age differences among doctoral students. This is the case in Luxembourg, where 4 years separate the 80<sup>th</sup> and 20<sup>th</sup> percentile age groups. In other countries, the age distribution is much wider. For example in Greece, Korea and Portugal, new entrants in the 80<sup>th</sup> percentile are 18 years older than those in the 20<sup>th</sup> percentile. However in all OECD countries, the median age is closer to the 20<sup>th</sup> percentile, indicating the age distribution skews more towards the younger than the older age group (Table B4.4).

**Figure B4.6. Distribution of new entrants to doctoral programmes, by field of study (2020)**

OECD average, in per cent



Source: OECD (2022), Table B4.4. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

### *Fields of study*

Students entering a doctoral programme are expected to contribute to and expand the knowledge base in their selected field of study. In contrast to lower levels of tertiary education, doctoral candidates tend to specialise more heavily in the science and technology-related fields of study. The field of natural sciences, mathematics and statistics attracts the largest share of doctoral graduates, 20% on average across OECD countries, followed by engineering, manufacturing and construction, and health and welfare, both at 17%. In contrast, business, administration and law, which accounted for the largest share of entrants at bachelor's level, represents less than 10% at doctoral level (Figure B4.6). Some of these differences may be explained by the availability of funding that can be accessed in different fields of education. For example, in the United States, doctoral students in STEM programmes are more likely to be able to rely primarily on funding from their institutions to support themselves through their studies than students in social sciences programmes, who are considerably more likely to rely on loans (Zeiser and Kirshstein, 2014<sup>[12]</sup>).

There are marked differences among countries in the distribution of the fields studied by doctoral new entrants. Although the largest share of doctoral students tend to enter natural sciences, mathematics and statistics across OECD countries, this varies from 10% in Mexico to 34% in Chile. Health and welfare accounts for more than 30% of new entrants at doctoral level in Denmark, Japan and Sweden. In Canada and Iceland, 20% of doctoral students entered into the broad field of social science, journalism and information, and the share of doctoral new entrants from this field exceeds 15% only in Hungary, Latvia and Portugal. Finally, 25% of doctoral students entered the field of ICT in Luxembourg, compared to an OECD average of 5% (Table B4.4).

### *Gender*

On average across OECD countries, women represented 49% of doctoral new entrants in 2020. Gender parity (where women represent between 48-52% of all first-time entrants) is observed in almost half of OECD countries. In 10 OECD countries, there is a higher share of male first-time entrants, while there is a higher share of female first-time entrants in the remaining 9 (Table B4.4).

Doctoral level is the only level of education where women represent less than 50% of entrants on average across the OECD. One of the reasons for the higher share of men is the predominance of STEM-related fields of study at doctoral level. In four out of the ten countries where men outnumber women among new entrants, at least 50% of doctoral students entered a STEM-related field (Chile, France, Italy and Luxembourg) (Table B4.4). The lower participation of women in STEM-related fields has prompted countries to initiate policy action to promote women in STEM and in research more generally. These actions vary from financial incentives and public awareness campaigns to prizes and awards for women in STEM, in order to encourage higher participation of women in science-related fields at different ages. For instance, Korea launched a plan in 2019 to raise the number of qualified female scientists and engineers. Australia, Germany and the United Kingdom, among other OECD countries, also have programmes to fund women's participation in STEM and research (García and Serve, 2022<sup>[13]</sup>).

### *International students*

Attracting the best doctoral students from around the world enables countries to build a leading role in research and innovation, and some countries have implemented policies to nurture an attractive research environment for potential students. Some countries, such as Australia and Italy, charge lower fees for doctoral programmes than at lower levels of education (see Indicator C5). However, the status of doctoral candidates varies across countries: whereas some countries recognise them as full employees within their respective tertiary institutions and remunerate them in line with junior academic staff, others consider them as students who are not regular employees of the institution. When employed, doctoral candidates may have different status and responsibilities across countries (see Box D8.2 in Indicator D8).

Doctoral students are more likely than other tertiary students to study abroad. On average across OECD countries, 30% of new entrants at doctoral level are international or foreign students, compared to 21% at master's level and 10% at bachelor's (Table B4.1). In some countries, international students make up the majority of new entrants at doctoral level: half or more are international students in Luxembourg, the Netherlands, New Zealand and Switzerland (Table B4.4).

## Definitions

**Adult education** is specifically targeted at individuals who are regarded as adults by their society to improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose to complete a level of formal education, or to acquire, refresh or update their knowledge, skills and competencies in a particular field. This also includes what may be referred to as 'continuing education', 'recurrent education' or 'second-chance education'.

**Initial education** is the education of individuals before their first entrance to the labour market, i.e. when they will normally be in full-time education. It thus targets individuals who are regarded as children, youth and young adults by their society. It typically takes place in educational institutions in a system designed as a continuous educational pathway.

**Internationally mobile students or international students** are those students who left their country of origin and moved to another country for the purpose of study.

**Master's long first degree (LFD)** is a five- to seven-year master's programme (ISCED 7-LFD) that prepares for a first degree or qualification that is equivalent to master's level programme in terms of their complexity of content. This includes highly specialised fields such as medicine, dentistry or, in some cases, law and engineering.

**New entrants to a tertiary level of education** are students enrolling for the first time in a tertiary level of education but who may have previously entered and completed a degree in another tertiary level of education.

## Methodology

The average age of students is calculated from 1 January for countries where the academic year starts in the second semester of the calendar year and 1 July for countries where the academic year starts in the first semester of the calendar year. As a consequence, the average age of new entrants may be overestimated by up to six months, while that of first-time graduates may be underestimated by the same.

International students are a significant share of the total student population in some countries, and their numbers can artificially inflate the proportion of today's young adults who are expected to enter tertiary programmes. When international students are included in the calculation, the percentage of expected first-time entrants into tertiary programmes can change significantly.

The field of education is determined by the main subject matter of a student's programme of study. For practical purposes, the main subject of a programme or qualification is determined by the detailed field in which the majority (i.e. more than 50%) or a clearly predominant part of the learning credits or students' intended learning time is spent. Learning credits, where available, should be used. Otherwise, an approximate assessment of the intended learning time should be made. Learning time includes time spent in lectures and seminars, as well as in laboratories or on special projects. Private study time is excluded (as it is difficult to measure and varies between students). Programmes and qualifications are classified in the detailed field containing their main subject (UNESCO Institute for Statistics, 2014<sup>[14]</sup>).

For more information, please see the *OECD Handbook for Internationally Comparative Education Statistics 2018* (OECD, 2018<sup>[15]</sup>) and Annex 3 for country-specific notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Source

Data refer to the 2019/20 academic year and are based on the UNESCO-UIS/OECD/Eurostat data collection on education statistics administered by the OECD in 2021. Data for some countries may have a different reference year. For details, see Annex 3 at [https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf).

## References

- European Commission (2015), *Dropout and Completion in Higher Education in Europe: Main Report*, Directorate-General for Education, Youth, Sport and Culture Publications Office, <https://doi.org/10.2766/826962>. [10]
- García, L. and B. Serve (2022), *Ending women's under-representation in science, technology, and innovation activities*, OECD Directorate for Science, Technology and Innovation website, [https://stiplab.github.io/datastories/gender/policy\\_note.html](https://stiplab.github.io/datastories/gender/policy_note.html) (accessed on 17 May 2022). [13]
- Hofer, A., A. Zhivkovikj and R. Smyth (2020), "The role of labour market information in guiding educational and occupational choices", *OECD Education Working Papers*, No. 229, OECD Publishing, Paris, <https://doi.org/10.1787/59bbac06-en>. [6]
- OECD (2020), "Women at the core of the fight against COVID-19 crisis", *Tackling Coronavirus (COVID-19): Contributing to a Global Effort*, OECD, <https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/>. [8]
- OECD (2019), *Benchmarking Higher Education System Performance*, Higher Education, OECD Publishing, Paris, <https://doi.org/10.1787/be5514d7-en>. [7]
- OECD (2019), *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/f8d7880d-en>. [4]
- OECD (2019), *OECD work on careers of doctorate holders*, <https://www.oecd.org/innovation/inno/careers-of-doctorate-holders.htm> (accessed on 6 July 2022). [3]
- OECD (2018), *OECD Handbook for Internationally Comparative Education Statistics 2018: Concepts, Standards, Definitions and Classifications*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264304444-en>. [15]
- OECD (2016), "Education and training for doctors and nurses: What's happening with numerus clausus policies?", in *Health Workforce Policies in OECD Countries: Right Jobs, Right Skills, Right Places*, OECD Publishing, Paris. [2]
- OECD (2016), "The teaching workforce in Estonia", in *OECD Reviews of School Resources: Estonia 2016*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264251731-9-en>. [11]
- OECD (2001), *Education Policy Analysis 2001*, OECD Publishing, Paris. [1]
- OECD/European Union (2020), *Health at a Glance: Europe 2020: State of Health in the EU Cycle*, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>. [9]
- UNESCO Institute for Statistics (2014), *ISCED Fields of Education and Training 2013 (ISCED-F 2013)*, UNESCO Institute for Statistics, Montreal, <https://doi.org/10.15220/978-92-9189-150-4-en>. [14]
- Vibli (2022), *Calculation of points on admission to studies at colleges and universities*, <https://www.vibli.no/en/en/no/calculation-of-points-on-admission-to-studies-at-colleges-and-universities/a/032925> (accessed on 6 July 2022). [5]
- Zeiser, K. and R. Kirshstein (2014), "Who pays for the doctorate? A tale of two PhDs", *Broadening Participation in STEM Issue Brief*, American Institutes for Research, <https://www.air.org/sites/default/files/downloads/report/STEM%20Graduate%20Funding%20Brief%20%20Sept%202014.pdf>. [12]

# Indicator B4 tables

## Tables Indicator B4. Who is expected to enter tertiary education?

<b>Table B4.1</b>	Profile of new entrants to short-cycle, bachelor's, master's levels and of first-time entrants into tertiary education (2020)
<b>Table B4.2</b>	Distribution of new entrants to tertiary education, by field of study (2015 and 2020)
<b>Table B4.3</b>	Share of women among new entrants to tertiary education, by selected fields of study and level of education (2020)
<b>Table B4.4</b>	Profile of new entrants to doctoral programmes (2020)

StatLink  <https://stat.link/m4dvp6>

Cut-off date for the data: 13 June 2022. Any updates on data can be found on line at: <http://dx.doi.org/10.1787/eaq-data-en>. More breakdowns can also be found at <http://stats.oecd.org>, *Education at a Glance Database*.

Table B4.1. Profile of new entrants to short-cycle, bachelor's, master's levels and of first-time entrants into tertiary education (2020)

	Short-cycle tertiary			Bachelor's or equivalent			Master's or equivalent						Tertiary education		
							All programmes			Long first degree programmes					
	Share of female new entrants	Average age of new entrants	Share of international new entrants	Share of female new entrants	Average age of new entrants	Share of international new entrants	Share of female new entrants	Average age of new entrants	Share of international new entrants	Share of female new entrants	Average age of new entrants	Share of international new entrants	Share of female first-time entrants	Average age of first-time entrants	Share of international first-time entrants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
<b>OECD</b>	<b>Countries</b>														
Australia	56	30	37	58	23	18	56	29	47	a	a	a	m	m	m
Austria	53	22	2	56	22	22	55	26	31	61	22	23	54	22	23
Belgium <sup>1</sup>	44	21	1	56	19	9	55	24	13	a	a	a	56	19	9
Canada <sup>2</sup>	51	23	25	57	20	17	57	26	30	61	23	2	54	22	24
Chile	54	24	2	52	21	1	58	32	7	63	19	0	54	22	1
Colombia	50	23	0	53	22	0	55	33	1	a	a	a	52	23	0
Costa Rica	m	m	m	m	m	m	m	m	m	a	a	a	m	m	m
Czech Republic	64	22	6	57	22	13	59	25	19	65	21	23	58	22	14
Denmark	48	31	9	58	25	7	56	26	21	a	a	a	55	25	7
Estonia	a	a	a	56	22	11	60	27	28	62	20	10	56	22	11
Finland	a	a	a	56	24	7	62	32	20	66	22	1	56	23	10
France	51	20	m	58	21	m	55	24	m	49	20	m	m	m	m
Germany	46	28	0	48	23	7	53	24	27	65	21	31	51	23	10
Greece	a	a	a	54	20	2	61	32	1	a	a	a	54	20	2
Hungary	59	23	1	54	21	9	56	25	27	58	21	32	55	21	12
Iceland	66	33	22	62	23	9	69	31	15	77	23	1	62	24	9
Ireland	54	34	3	52	21	6	58	31	29	m	m	m	m	m	m
Israel	52	23	2	57	24	4	63	33	5	a	a	a	56	24	4
Italy	26	22	0	54	20	2	57	24	6	67	19	3	55	20	2
Japan	60	m	m	46	19	m	35	24	m	51	19	m	51	18	m
Korea	50	21	1	50	19	2	54	32	13	a	a	a	m	m	m
Latvia	67	29	1	48	23	17	59	28	30	72	22	44	m	m	m
Lithuania	a	a	a	54	22	7	62	26	9	68	20	29	55	22	9
Luxembourg	54	22	11	54	22	26	58	29	69	a	a	a	54	22	22
Mexico	40	20	1	52	21	1	57	31	3	a	a	a	52	21	1
Netherlands	50	25	2	54	20	17	56	25	32	a	a	a	54	20	17
New Zealand	57	29	13	59	23	21	59	31	34	a	a	a	58	23	21
Norway	20	27	1	58	23	4	60	26	7	61	22	1	55	22	2
Poland	91	40	0	52	22	m	68	25	m	69	22	m	54	22	6
Portugal	40	21	19	56	21	11	57	24	20	52	19	11	54	20	12
Slovak Republic	69	24	1	55	22	11	60	24	10	67	21	34	56	22	12
Slovenia	39	24	5	56	21	10	62	25	10	75	19	9	54	20	10
Spain	48	23	2	56	20	3	59	27	18	68	20	13	54	22	8
Sweden	49	29	0	61	25	6	57	27	23	57	26	4	57	24	14
Switzerland	60	32	0	50	24	11	51	27	32	84	24	3	51	25	18
Türkiye	51	25	1	53	23	6	48	27	8	55	19	11	52	24	4
United Kingdom	56	29	6	56	22	18	60	27	49	a	a	a	56	23	14
United States	55	23	3	m	m	m	60	30	19	a	a	a	55	20	4
OECD average	52	26	6	55	22	10	58	27	21	64	21	14	55	22	10
EU22 average	53	26	4	55	22	10	59	26	22	64	21	19	55	22	11
<b>Partners</b>															
Argentina	m	m	m	m	m	m	m	m	m	m	m	m	59	m	m
Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
China	m	m	m	m	m	m	m	m	m	m	m	m	52	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m	48	m	m
Indonesia <sup>2</sup>	59	m	m	55	m	m	46	m	m	m	m	m	56	m	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	46	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: See *Definitions* and *Methodology* sections for more information. Data and more breakdowns available at <http://stats.oecd.org>, *Education at a Glance Database*.

1. Short-cycle tertiary data refer to the Flemish Community of Belgium only.

2. Reference year 2019.

Source: OECD/UIS/Eurostat (2022). See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)). Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <https://stat.link/gonjet>



Table B4.2. Distribution of new entrants to tertiary education, by field of study (2015 and 2020)

OECD	2020									2015								
	Education	Arts and humanities	Social sciences, journalism and information	Business, administration and law	Natural sciences, mathematics and statistics	Information and communication technologies	Engineering, manufacturing and construction	Health and welfare	Services	Education	Arts and humanities	Social sciences, journalism and information	Business, administration and law	Natural sciences, mathematics and statistics	Information and communication technologies	Engineering, manufacturing and construction	Health and welfare	Services
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
<b>Countries</b>																		
Australia	9	11	6	32	5	7	8	19	2	m	m	m	m	m	m	m	m	m
Austria	12	9	7	24	7	6	19	8	6	12	10	9	23	7	4	20	6	7
Belgium	7	10	11	25	4	4	13	23	1	8	11	11	22	4	3	13	25	2
Canada <sup>1</sup>	3	8	9	22	12	6	13	16	7	m	m	m	m	m	m	m	m	m
Chile	10	4	4	23	2	5	21	20	7	9	4	5	22	2	4	21	19	12
Colombia	8	4	10	41	2	6	18	5	3	7	4	9	39	2	6	21	6	4
Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Czech Republic	11	9	9	19	7	7	15	13	7	9	9	9	20	6	5	18	12	8
Denmark	5	9	9	30	5	6	12	19	3	6	12	10	29	5	5	10	19	3
Estonia	7	14	7	21	7	10	14	12	5	6	13	8	21	6	9	18	10	6
Finland	5	9	5	21	4	9	19	22	5	4	9	5	20	5	9	20	22	5
France	3	14	9	30	11	3	13	12	4	m	m	m	m	m	m	m	m	m
Germany	9	10	7	25	9	7	22	7	3	7 <sup>b</sup>	11 <sup>b</sup>	8 <sup>b</sup>	24 <sup>b</sup>	10 <sup>b</sup>	6 <sup>b</sup>	23 <sup>b</sup>	6 <sup>b</sup>	2 <sup>b</sup>
Greece	6	12	14	20	10	4	16	11	3	7	13	12	18	10	4	21	8	3
Hungary	9	10	11	24	4	9	13	11	7	12	11	10	22	4	4	15	11	7
Iceland	13	12	14	19	6	4	11	15	4	11	14	14	23	6	6	10	12	3
Ireland	7	14	6	24	9	7	10	16	5	7	16	6	21	9	8	10	15	5
Israel	19	7	17	16	8	8	17	8	0	20	9	18	15	7	5	19	8	0
Italy	5	20	15	16	11	2	17	8	4	m	m	m	m	m	m	m	m	m
Japan <sup>2</sup>	8 <sup>d</sup>	16 <sup>d</sup>	8 <sup>d</sup>	20 <sup>d</sup>	3 <sup>d</sup>	x	17 <sup>d</sup>	16 <sup>d</sup>	9 <sup>d</sup>	9 <sup>d</sup>	16 <sup>d</sup>	8 <sup>d</sup>	19 <sup>d</sup>	3 <sup>d</sup>	x	17 <sup>d</sup>	16 <sup>d</sup>	9 <sup>d</sup>
Korea	7	16	6	13	5	5	21	16	11	7	16	5	14	5	5	21	15	11
Latvia	5	7	8	30	3	8	14	16	8	6	8	8	30	3	7	18	12	7
Lithuania	3	11	9	28	5	7	16	17	2	4	9	11	30	4	4	21	12	3
Luxembourg	12	10	11	27	8	10	9	10	0	6	13	12	37	5	5	9	13	0
Mexico	11	4	8	33	3	5	18	11	3	8	4	9	31	3	2	27	12	1
Netherlands	7	7	15	28	7	5	10	15	5	10	8	12	29	6	3	9	16	6
New Zealand	7	14	11	21	12	6	10	12	4	7	14	11	24	10	7	8	11	6
Norway	13	11	14	17	5	6	11	16	5	10	13	13	17	6	4	12	15	8
Poland	7	11	12	23	5	6	15	11	9	9	10	12	23	5	5	18	9	9
Portugal	4	11	12	24	6	3	18	13	7	6	11	12	24	6	2	17	13	7
Slovak Republic	13	7	11	19	5	6	14	16	7	13	7	12	19	6	4	14	16	6
Slovenia	8	8	9	20	6	6	19	11	9	8	8	9	20	6	5	21	8	9
Spain	12	11	8	20	5	6	13	15	8	11	12	8	20	6	5	15	14	8
Sweden	11	13	11	16	6	6	19	15	3	12	13	11	15	5	5	19	16	2
Switzerland	8	8	7	27	8	4	16	16	4	8	8	7	29	8	3	15	14	7
Türkiye	4	13	8	28	3	3	12	19	8	6	14	9	36	2	2	14	10	5
United Kingdom	6	13	16	27	8	6	9	13	0	8 <sup>b</sup>	15 <sup>b</sup>	12 <sup>b</sup>	22 <sup>b</sup>	14 <sup>b</sup>	6 <sup>b</sup>	8 <sup>b</sup>	13 <sup>b</sup>	0 <sup>b</sup>
United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD average	8	10	10	24	6	6	15	14	5	9	11	10	24	6	5	16	13	5
OECD average if available data for STEM related fields in both years	9	10	10	24	6	6	15	14	5	9	11	10	24	6	5	16	13	5
EU22 average	8	11	10	23	7	6	15	14	5	8	11	10	23	6	5	16	13	5
<b>Partners</b>																		
Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: See Definitions and Methodology sections for more information. Data (i.e. on the field of Agriculture, forestry, fisheries and veterinary) and more breakdowns available at <http://stats.oecd.org>, Education at a Glance Database.

1. Reference year 2019.

2. All fields of study include the field of information and communication technologies.

Source: OECD/Eurostat (2022). See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)). Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table B4.3. Share of women among new entrants to tertiary education, by selected fields of study and level of education (2020)

	Short-cycle tertiary				Bachelor's or equivalent				Master's or equivalent				Doctoral or equivalent				
	Education	STEM		Health and welfare	Education	STEM		Health and welfare	Education	STEM		Health and welfare	Education	STEM		Health and welfare	
		Total	ICT			Total	ICT			Total	ICT			Total	ICT		
		(1)	(2)			(3)	(4)			(5)	(6)			(7)	(8)		(9)
<b>OECD</b>	<b>Countries</b>																
	Australia	91	25	22	76	72	34	20	76	73	35	33	73	70	42	31	65
	Austria	86	18	11	70	73	38	22	78	82	34	23	64	76	32	22	54
	Belgium <sup>1</sup>	57	10	8	77	71	22	11	75	78	28	6	66	m	m	m	m
	Canada <sup>2</sup>	85	22	22	84	74	43	20	85	81	39	31	68	73	36	28	65
	Chile	98	12	12	83	73	24	12	77	73	30	17	69	61	37	26	53
	Colombia	25	30	27	60	62	31	16	68	64	35	28	65	50	32	50	64
	Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	a	a	a	a	79	32	16	87	81	37	21	72	68	39	18	57
	Denmark	65	22	16	85	61	32	20	80	81	42	35	72	a	33	a	63
	Estonia	a	a	a	a	93	33	24	88	87	38	38	81	92	44	30	78
	Finland	a	a	a	a	83	27	21	86	88	31	30	81	80	39	23	64
	France	74	24	17	85	85	37	16	83	74	33	21	68	67	38	25	56
	Germany	a	30	a	56	80	25	21	79	77	34	26	70	70	34	19	60
	Greece	a	a	a	a	84	39	22	72	83	44	38	71	66	39	30	56
	Hungary	a	14	15	92	96	24	16	85	66	35	23	61	75	38	20	56
	Iceland	52	48	31	100	70	41	24	88	80	44	31	86	78	33	22	88
	Ireland	90	31	21	71	74	33	19	78	71	36	29	78	76	43	36	65
	Israel	82	28	48	79	78	36	30	80	84	37	24	77	77	44	28	74
	Italy	a	11	17	a	93	38	14	76	92	39	19	63	76	39	24	62
	Japan <sup>3</sup>	92 <sup>d</sup>	17	x	71 <sup>d</sup>	59 <sup>d</sup>	18	x	73 <sup>d</sup>	46 <sup>d</sup>	16	x	51 <sup>d</sup>	46 <sup>d</sup>	17	x	34 <sup>d</sup>
	Korea	92	15	26	70	67	30	27	68	78	31	23	70	75	27	19	57
	Latvia	98	17	21	91	87	24	16	87	88	35	27	74	75	38	39	68
	Lithuania	a	a	a	a	88	21	12	86	82	37	18	77	67	38	23	62
	Luxembourg	a	18	13	83	64	28	21	68	75	43	41	82	50	35	23	a
	Mexico	86	25	27	65	74	31	24	70	71	37	26	61	61	40	25	60
	Netherlands	78	10	10	79	72	28	13	78	81	38	29	74	84	30	14	63
	New Zealand	69	35	22	82	85	43	29	79	80	42	36	82	72	44	35	73
	Norway	a	10	26	86	75	30	19	83	71	39	25	80	68	37	30	65
	Poland	a	a	a	91	69	32	13	81	94	46	21	76	65	43	16	62
	Portugal	93	13	7	87	87	32	18	80	71	39	28	77	70	44	26	71
	Slovak Republic	93	38	a	74	79	26	13	76	78	32	14	74	62	41	19	55
	Slovenia	a	16	15	89	87	30	17	78	84	36	20	81	76	42	26	62
	Spain	92	15	12	78	77	33	15	75	69	39	22	72	62	41	24	61
	Sweden	a	28	27	80	83	38	27	82	71	36	37	79	77	40	30	63
	Switzerland	93	5	a	81	76	24	13	77	67	32	18	69	67	40	21	59
	Türkiye	a	23	25	75	62	35	30	86	60	39	30	60	57	47	44	72
	United Kingdom	71	23	26	77	87	31	17	78	74	37	30	76	69	38	30	63
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	80	21	20	79	77	31	19	79	77	36	26	72	69	38	26	63
	EU22 average	83	20	15	81	80	31	18	80	80	37	26	73	72	38	24	62
<b>Partners</b>	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

**Note:** STEM refers to the fields of science, technology, engineering and mathematics; ICT stands for information and communication technologies. See *Definitions and Methodology* sections for more information. Data and more breakdowns available at <http://stats.oecd.org>, *Education at a Glance Database*.

1. Short-cycle tertiary data refer to the Flemish Community of Belgium only.

2. Reference year 2019.

3. All fields of study include the field of information and communication technologies.

**Source:** OECD/UIS/Eurostat (2022). See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table B4.4. Profile of new entrants to doctoral programmes (2020)

	Share of female new entrants	Share of new entrants below the age of 30	Share of international new entrants	Average age of new entrants	Age distribution of new entrants			Share of new entrants by field of study										
					20th percentile	Median	80th percentile	Education	Arts and humanities	Social sciences, journalism and information	Business, administration and law	Natural sciences, mathematics and statistics	Information and communication technologies	Engineering, manufacturing and construction	Agriculture, forestry, fisheries and veterinary	Health and welfare	Services	
					(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>OECD</b>																		
<b>Countries</b>																		
Australia	53	49	29	33	25	30	42	5	14	10	8	21	5	16	3	18	0	
Austria	45	65	43	30	26	28	33	2	13	7	13	17	7	23	3	14	1	
Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Canada <sup>1</sup>	50	65	41	30	25	28	34	4	11	20	5	24	3	19	2	9	2	
Chile	43	41	24	32	27	31	37	5	11	12	3	34	2	19	6	8	0	
Colombia	41	20	2	37	30	36	44	14	7	14	11	19	0	23	3	9	0	
Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Czech Republic	46	75	30	29	25	27	32	4	12	8	9	20	4	23	6	11	3	
Denmark	50	64	35	29	26	28	33	0	9	12	0	12	0	28	3	37	0	
Estonia	55	61	43	30	26	29	34	4	16	5	7	23	13	15	6	10	0	
Finland	56	41	35	33	27	31	39	7	14	11	9	15	7	13	3	20	1	
France	46	78	m	28	24	26	31	1	15	11	9	29	5	16	1	11	1	
Germany	47	68	25	29	26	28	32	2	9	6	9	25	4	15	2	28	0	
Greece	50	48	2	33	26	31	44	5	13	7	9	12	5	21	3	23	2	
Hungary	49	61	30	30	26	28	36	5	18	16	6	17	4	9	4	17	4	
Iceland	57	43	49	34	27	31	41	7	7	20	6	16	7	16	0	20	2	
Ireland	54	62	41	30	24	28	36	6	11	13	6	24	7	15	2	17	0	
Israel	54	39	9	34	28	32	41	5	13	12	6	30	6	12	2	14	0	
Italy	47	72	12	29	25	27	32	1	10	7	10	26	2	24	5	14	0	
Japan <sup>2</sup>	32	57	18	30	25	29	35	4 <sup>d</sup>	11 <sup>d</sup>	3 <sup>d</sup>	4 <sup>d</sup>	11 <sup>d</sup>	x	18 <sup>d</sup>	5 <sup>d</sup>	45 <sup>d</sup>	0 <sup>d</sup>	
Korea	45	42	21	35	26	32	44	7	16	7	13	11	4	21	2	14	5	
Latvia	52	41	13	34	27	32	43	5	10	16	18	14	8	18	1	8	3	
Lithuania	49	59	13	30	26	29	35	4	12	11	8	26	2	21	5	11	0	
Luxembourg	39	74	90	28	26	28	31	2	11	14	7	26	25	16	0	0	0	
Mexico	52	22	7	36	30	37	44	39	5	10	22	10	1	6	2	5	1	
Netherlands	49	86	60	27	25	26	29	m	m	m	m	m	m	m	m	m	m	
New Zealand	55	50	50	33	25	30	41	7	9	14	8	21	5	16	3	16	1	
Norway	53	45	34	33	27	31	39	6	14	11	4	25	2	12	1	24	0	
Poland	50	77	m	28	25	26	31	3	20	11	11	18	2	15	3	13	2	
Portugal	51	38	39	35	27	33	44	7	14	18	11	12	3	19	2	10	4	
Slovak Republic	48	63	15	30	25	27	38	7	12	9	13	16	3	15	3	18	5	
Slovenia	54	60	23	31	26	28	38	6	16	7	11	13	4	18	0	22	2	
Spain	50	51	24	33	25	30	41	5	14	15	9	19	3	13	2	19	2	
Sweden	52	55	43	31	26	29	37	3	4	7	2	18	6	22	2	35	1	
Switzerland	50	74	59	28	26	28	31	2	9	8	9	27	4	13	2	26	0	
Türkiye	50	49	11	31	27	30	36	7	18	10	14	13	1	22	4	10	2	
United Kingdom	51	67	43	29	23	26	35	4	14	15	8	25	5	14	1	13	0	
United States	50	60	24	31	23	27	40	m	m	m	m	m	m	m	m	m	m	
OECD average	49	56	30	31	26	29	37	6	12	11	9	20	5	17	3	17	1	
EU22 average	49	62	32	30	26	29	36	4	13	11	9	19	6	18	3	17	2	
<b>Partners</b>																		
Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Indonesia <sup>1</sup>	35	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	

Note: See Definitions and Methodology sections for more information. Data and more breakdowns available at <http://stats.oecd.org>, Education at a Glance Database.

1. Reference year 2019.

2. All fields of study include the field of information and communication technologies.

Source: OECD/UIS/Eurostat (2022). See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <https://stat.link/dn0wim>



**From:**  
**Education at a Glance 2022**  
OECD Indicators

**Access the complete publication at:**  
<https://doi.org/10.1787/3197152b-en>

**Please cite this chapter as:**

OECD (2022), “Who is expected to enter tertiary education?”, in *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/e934dcd5-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.