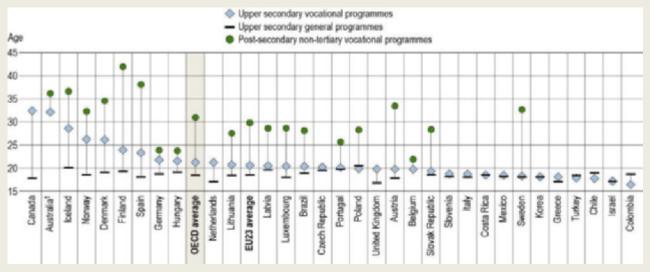
# Indicator B3. Who is expected to graduate from upper secondary education?

### **Highlights**

- In almost all countries with available data, women represent at least half of upper secondary graduates from general programmes. In contrast, women are under-represented in vocational programmes in about seven out of ten countries with available data.
- Across OECD countries, the average age of first-time graduation at upper secondary level is higher for vocational programmes (21 years old) than for general programmes (18 years old), and much higher for post-secondary non-tertiary vocational programmes (31 years old).
- Current estimates indicate that on average, 86% of people across OECD countries will graduate from upper secondary education in their lifetime, and 81% of people will do so before the age of 25.



# Figure B3.1 Average age of first-time upper secondary and post-secondary non-tertiary graduates, by programme orientation (2017)

1. Year of reference 2016.

Countries are ranked in descending order of the average age of first time graduates from upper secondary vocational programmes. **Source**: OECD/UIS/Eurostat (2019), data could slightly differ from Tables B3.1 and B3.2 as they refer to first-time graduates. See Source section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

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#### Context

Upper secondary education, defined as the second stage of learning after completing lower secondary education, is essential for both pursuing further levels of education and successful labour market integration. It can be either vocational or general and provided in both public and private schools, or in vocational and technical institutes. In many countries, this level of education is not compulsory and can last from two to five

years. Post-secondary non-tertiary programmes straddle upper secondary and post-secondary education and may be considered either upper secondary or post-secondary programmes, depending on the country.

In most developed countries, almost all students in lower secondary school enrol in upper secondary education and most of them study in programmes providing access to tertiary education. In general, demand for upper secondary education is increasing worldwide, with the development of a variety of educational pathways. In fact, graduating from upper secondary education has become increasingly important in all countries, as the skills needed in the labour market are becoming more knowledge-based, and workers are progressively required to adapt to the uncertainties of a rapidly changing global economy.

However, while graduation rates give an indication of the extent to which education systems are succeeding in preparing students to meet the minimum requirements of the labour market, they do not capture the quality of education outcomes.

#### **Other findings**

- The average age of graduates from vocational programmes varies considerably across countries, particularly at upper secondary level. In Canada, the average age of graduates from upper secondary vocational programmes is 32 years old compared with 16 in Colombia.
- On average across OECD countries, first-time graduation rates increased by 2 percentage points at the upper secondary level and remained constant at the post-secondary non-tertiary level, between 2010 and 2017.
- On average across OECD countries, women represent 54% of post-secondary non-tertiary graduates; however, variations across countries are significant, ranging from 19% in Luxembourg to 75% in Austria and Poland.

#### Note

Graduation rates, when calculated for all ages, represent the estimated percentage of people from a given age cohort who are expected to graduate within the country at some point during their lifetime. This estimate is based on the number of graduates in 2017 and the age distribution of this group. Graduation rates are based on both the population and the current pattern of graduation and are thus sensitive to any changes in the education system, such as the introduction of new programmes and changes in the duration of programmes. Graduation rates can be very high during a period when an unexpected number of people go back to school.

In this edition of *Education at a Glance*, the focus is predominately on first-time graduates. The notion of graduates (i.e. all graduates, not only first-time graduates) is used when measuring average age, share of female graduates and graduates by field of study (see *Definitions* section).

#### A corrigendum has been issued for this page. See http://www.oecd.org/about/publishing/Corrigendum\_EAG2019.pdf

#### 182 | B3. WHO IS EXPECTED TO GRADUATE FROM UPPER SECONDARY EDUCATION?

#### Analysis

#### Profile of upper secondary graduates

#### Profile of upper secondary graduates, by programme orientation

Although many countries have developed extensive vocational programmes at the secondary level, in most countries, fewer students pursue vocational programmes than general programmes. On average across OECD countries, 40% of first-time upper secondary graduates obtained a qualification from a vocational programme. The share of first-time graduates from vocational programmes is particularly low in Brazil, Canada, Colombia, Costa Rica, Hungary, Iceland, Japan, Korea and Lithuania (below 25%). In contrast, in Austria, the Czech Republic, the Slovak Republic and Slovenia, more than 65% of first-time graduates obtained a qualification from a vocational programme.

Vocational education and training (VET) is an important part of upper secondary education in many OECD countries, and it can play a central role in preparing young people for work, developing adults' skills and responding to labour-market needs (see Indicator A1). In some countries, VET has been neglected and marginalised in policy discussions, often overshadowed by the increasing emphasis on general academic education. However, participating in an initial VET programme has both, micro and macro beneficial outcomes: the opportunity to acquire qualifications, integration into the labour market with a satisfactory wage, further career development opportunities, professional status and economic competitiveness (CEDEFOP, 2011<sub>[1]</sub>).

It has been also found that VET has a positive effect on graduates' employability, because of their early entry into the labour market. The transition to work is faster for upper secondary graduates from vocational programmes than those enrolled in general programmes; they are more likely to get a permanent first job and are less likely to find themselves in a first job with a qualification mismatch. At a time when professional experience is often a requirement to enter the labour market, vocational upper secondary graduates have an advantage over those with little or no professional experience. However, at tertiary level the opposite pattern is found: technical graduates have to search significantly longer for a job than academic graduates in the European Union, mainly because tertiary technical programmes develop more specific skills that lead to a relatively longer search for the correct match (CEDEFOP, 2013<sub>[2]</sub>).

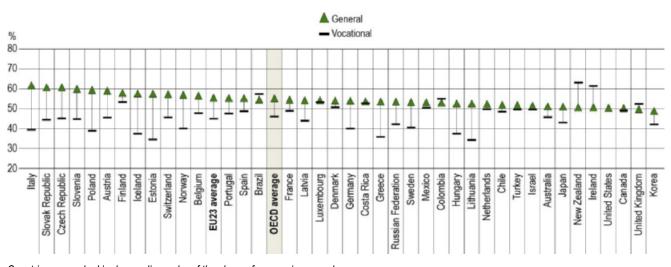
Vocational programmes can be offered in combined school- and work-based programmes, where between 10% and 75% of the curriculum is presented in the school environment or through distance education. These include apprenticeship programmes that involve concurrent school-based and work-based training, and programmes that involve alternating periods of attendance at educational institutions and participation in work-based training. In countries such as Austria, Denmark, Germany, Latvia, Norway and Switzerland, this type of dual system attracts at least 30% of the students enrolled in upper secondary VET programmes (see the Education at a Glance Database). Through work-based learning, students acquire the skills that are valued in the workplace. Work-based learning is also a way to develop public-private partnerships and to involve social partners and employers in developing VET programmes, often by defining curricular frameworks.

Moreover, high-quality VET programmes can be effective in developing skills among those who would otherwise lack the qualifications to ensure a smooth and successful transition into the labour market. However, it is important to ensure that graduates of upper secondary VET programmes have good employment opportunities, since VET can be more expensive than other education programmes (see Indicator C1).

#### Profile of upper secondary graduates, by gender

The share of women tends to be significantly higher in upper secondary general programmes than in vocational programmes. On average across OECD countries, women make up 55% of upper secondary graduates from general programmes, compared to 48% for vocational programmes.

In almost all countries with available data, women make up at least half of upper secondary graduates from general programmes, ranging from 49% in Korea to 61% in the Czech Republic and the Slovak Republic, and 62% in Italy. In contrast, women are under-represented in vocational programmes in about seven out of ten countries with available data (Figure B3.2).





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There is, however, significant cross-country variation in vocational programmes. The share of women ranges from less than 36% in Estonia and Lithuania to 63% in New Zealand. In fact, New Zealand is one of just five countries (i.e. Brazil, Colombia, Ireland and the United Kingdom) where women make up a higher share of graduates in vocational programmes than in general programmes. In these countries, the difference between the share of women in vocational and general programmes ranges from less than 4 percentage points in Brazil, Colombia and the United Kingdom to over 10 percentage points in Ireland and New Zealand (Figure B3.2).

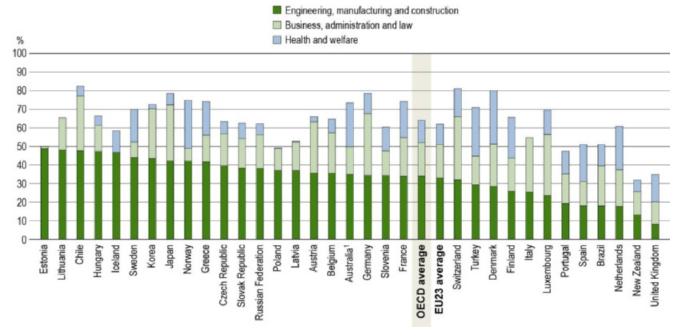
#### Profile of upper secondary vocational graduates, by field of study

On average across OECD countries, 33% of graduates from upper secondary vocational programmes earn a qualification in the field of engineering, manufacturing and construction. This falls to 18% for business, administration and law, and 11% for health and welfare. However, this pattern does not hold for every country. In Chile, Estonia, Hungary, Iceland and Lithuania nearly 50% of students graduate with a specialisation in engineering, manufacturing and construction. In contrast, business, administration and law is the most popular field in upper secondary vocational programmes for Brazil, Luxembourg and Switzerland. In Denmark, the Netherlands, Spain and the United Kingdom, the field of health and welfare is the most popular (Figure B3.3).

The percentage of women pursuing a programme in engineering, manufacturing and construction is low at the upper secondary vocational level: only 12% of graduates in this field of study are women. On the other hand, women are over-represented in health and welfare, where they make up 82% of graduates on average. In fact, in health and welfare, the share of female graduates exceeds 75% in all countries except Latvia (71%), Poland (56%), Slovenia (73%) and Sweden (72%). Between these two extremes, there is more gender balance in the field of services where, on average, 61% of graduates are women, and in business, administration and law, where 65% of graduates are women (Table B3.1).

Countries are ranked in descending order of the share of women in general programmes. **Source**: OECD/UIS/Eurostat (2019), Education at a Glance Database, <u>http://stats.oecd.org/</u>. See Source section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

#### **184** | B3. WHO IS EXPECTED TO GRADUATE FROM UPPER SECONDARY EDUCATION?



#### Figure B3.3 Distribution of upper secondary vocational graduates by selected field of study (2017)

1. Year of reference 2016.

Countries are ranked in descending order of the share of engineering, manufacturing and construction graduates. **Source**: OECD/UIS/Eurostat (2019), Table B3.1. See *Source* section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

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Gender gaps in fields of study may be partly due to social perceptions of what women and men excel at and the careers they can pursue. For example, the low share of women in the field of engineering, manufacturing and construction may result from the social perception of science as being a masculine domain, which may discourage women from pursuing studies in that field (OECD, 2015<sub>[3]</sub>).

#### Profile of upper secondary vocational graduates, by age

The average age of upper secondary graduates tends to be older for vocational programmes than general programmes. On average across OECD countries, first-time upper secondary graduates obtain their qualification at the age of 21 in vocational programmes, compared to 18 in general programmes (Figure B3.1).

However, there is some variation across countries. In Canada, Denmark, Iceland and Norway, the average graduation age is significantly higher for vocational programmes than general ones, with a difference of at least seven years. In contrast, in Chile, Colombia and Poland, students graduate from general programmes at least one year later than from vocational programmes. In the Czech Republic, Israel, Korea, Mexico, Portugal, the Slovak Republic, Sweden and Turkey, the average graduation age is the same for both general and vocational programmes (Figure B3.1).

Differences between the graduation age in vocational and general programmes may reflect differences in these programmes' duration. For instance, in Norway, vocational programmes are one year longer than general programmes, which could contribute to the higher graduation age for vocational programmes (OECD Education GPS, 2018<sub>[4]</sub>).

#### Profile of post-secondary non-tertiary graduates

Various kinds of post-secondary non-tertiary programmes (ISCED level 4) are offered in OECD countries. These programmes straddle upper secondary and post-secondary education and may be considered either upper secondary or post-secondary programmes, depending on the country. Although the content of these programmes may not be significantly more advanced than upper secondary programmes, they broaden the knowledge of individuals who have already attained an upper secondary qualification. However about 13 countries do not offer programmes at post-secondary non-tertiary level of education.

#### Profile of post-secondary non-tertiary graduates, by programme orientation

On average across OECD countries, around 94% of post-secondary non-tertiary first-time graduates have graduated from vocational programmes. Professionalisation is particularly high at this level of education as post-secondary non-tertiary programmes are most often designed for direct labour market entry. There are some national initiatives to provide general programmes at post-secondary non-tertiary level to target students who have completed a vocational upper secondary level and want to increase their chances of entering tertiary education. For instance, in Switzerland, a one-year general programme – *Programme Passerelle DUBS* – prepares graduates from vocational upper secondary education to enter general programmes at the tertiary level (OECD/Eurostat/UNESCO Institute for Statistics, 2015<sub>[5]</sub>)

#### Profile of post-secondary non-tertiary graduates, by age

The average age of first-time graduates from vocational programmes tends to be higher for post-secondary non-tertiary education than for upper secondary education. On average across OECD countries, first-time upper secondary vocational graduates obtain their qualification at the age of 21, compared to 31 for vocational post-secondary non-tertiary programmes. However, significant variation exists across countries: whereas for some countries, such as Germany, Hungary and Belgium, there is a difference of only two years between the average age of first-time graduation from upper secondary and post-secondary non-tertiary education, for others, such as Finland, Spain and Sweden, the difference is more than 14 years (Figure B3.1).

This pattern could be partially explained by the fact that some countries have developed lifelong learning strategies. In fact, some countries are progressively developing pathways for adults in their VET strategy. In Denmark, Adult Vocational training (AMU) aims to provide adults with skills and competencies relevant to the labour market. The programmes help learners either deepen their existing knowledge in a particular field or develop new knowledge in related fields (CEDEFOP, 2019[6]).

#### Profile of post-secondary non-tertiary graduates, by field of study

On average across OECD countries, 21% of post-secondary non-tertiary graduates in vocational programmes specialised in health and welfare, 21% in services followed by 20% for business, administration and law; and 19% for engineering, manufacturing and construction. However, this pattern is not always repeated across countries. In Luxembourg, for instance, 80% of post-secondary non-tertiary graduates obtained a qualification in engineering, manufacturing and construction whereas in Austria the share is only 1% (Table B3.2).

#### Profile of post-secondary non-tertiary graduates, by gender

On average across OECD countries, women make up 54% of post-secondary non-tertiary graduates but there are significant variations across countries, with the share ranging from 19% in Luxembourg to 75% in Austria and Poland.

In almost all countries with available data, women make up more than half of post-secondary non-tertiary graduates from vocational programmes, except in Australia, Belgium, the Czech Republic, Denmark, Iceland, Luxembourg, Portugal and the Russian Federation. The percentage of women pursuing a programme in

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#### **186** | B3. WHO IS EXPECTED TO GRADUATE FROM UPPER SECONDARY EDUCATION?

engineering, manufacturing and construction is low at the post-secondary non-tertiary level: they make up only 18% of graduates in this field. In contrast, women are over-represented in health and welfare, where the share of female graduates is 75% or more in all countries, except Australia (70%). There is more gender balance in the field of services, where on average 57% of graduates are women, and business, administration and law, where the figure is 66% (Table B3.2).

#### First-time graduation rates

#### Upper secondary graduation rates

An upper secondary education is often considered to be the minimum credential for successful entry into the labour market and necessary for continuing to further education. The costs of not completing this level of education on time can be considerable to both individuals and society (see Indicator A5).

Graduation rates offer an indication of whether government initiatives have been successful in increasing the share of people who graduate from upper secondary education. The large differences in graduation rates among countries reflect the variety of systems and programmes available, as well as other country-specific factors, such as current social norms and economic performance.

Current estimates indicate that, on average, 86% of people across OECD countries will graduate from upper secondary education in their lifetime, and 81% of people will do so before the age of 25. First-time graduation rates for those under 25 exceed 80% in more than half of OECD countries with available data, with values ranging from 60% in Mexico to over 90% in Greece, Korea and Slovenia (Table B3.3).

The higher graduation rates for general programmes may reflect the lower share of students enrolled in upper secondary vocational programmes than in general programmes (see Indicator B1), along with lower completion rates for vocational education (Box B3.1 in (OECD, 2017<sub>[7]</sub>)).

In countries with available data, the first-time upper secondary graduation rate for those below the age of 25 increased by 2 percentage points between 2010 and 2017. The increase was striking in three countries: Spain, Turkey (both 18 percentage points) and Mexico (15 percentage points). In contrast, the first-time graduation rate for those under 25 fell by 5 percentage points in Austria, Lithuania and Sweden and by 13 percentage points in the Slovak Republic over the same period (Table B3.3).

However, improved upper secondary graduation rates alone will not guarantee that all graduates will pursue a tertiary degree or enter the labour force immediately, nor that they will have the right skills to succeed once in employment. Indeed, the number of upper secondary graduates who wind up neither employed nor in education or training (NEET) has been growing in about half of OECD countries (see Indicator A2). For this reason, it is important to have high-quality upper secondary programmes that provide individuals with the right mix of guidance and education opportunities to ensure that there are no dead ends after graduation.

#### Post-secondary non-tertiary graduation rates

First-time graduation rates from post-secondary non-tertiary education are low compared to those from upper secondary programmes. On average, it is estimated that 11% of today's young people in OECD countries will complete a post-secondary non-tertiary programme over their lifetime. The only countries where first-time graduation rates (for all ages) from post-secondary non-tertiary programmes exceed 20% are the Czech Republic, Germany, Hungary, Lithuania, New Zealand and the United States. For OECD countries with available data for 2005, 2010 and 2017, the first-time graduation rate (for people younger than 30) has remained constant over the past decade, at around 3% on average. Nine countries do not offer this level of education: Chile, Costa Rica, Indonesia, Korea, Mexico, the Netherlands, Slovenia, Turkey and the United Kingdom (Table B3.3).

#### Definitions

**Graduates** in the reference period can be either first-time graduates or repeat graduates. A first-time graduate is a student who has graduated for the first time at a given level of education in the reference period. Thus, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

**Net graduation rates** represent the estimated percentage of an age group that will complete upper secondary education, based on current patterns of graduation.

**Typical age** is the age at the beginning of the last school/academic year of the corresponding educational level and programme when the degree is obtained.

#### Methodology

Unless otherwise indicated, graduation rates are calculated as net graduation rates (i.e. as the sum of agespecific graduation rates). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

Graduates by programme orientation at the upper secondary and post-secondary non-tertiary levels are not counted as first-time graduates, given that many students graduate from more than one upper secondary or post-secondary non-tertiary programme. Therefore, graduation rates cannot be added, as some individuals would be counted twice. In addition, the typical graduation ages are not necessarily the same for the different types of programmes (see Annex 1). Vocational programmes include both school-based programmes and combined school- and work-based programmes that are recognised as part of the education system. Entirely work-based education and training programmes that are not overseen by a formal education authority are not included.

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 from 1 July for countries where the academic year starts in the first semester of the calendar year. As a consequence, the average age of first-time graduates may be underestimated by up to six months.

When an age breakdown is not available, the gross graduation rate is calculated instead. This refers to the total number of graduates divided by the average cohort of the population at the typical age provided by the country.

In this indicator, age refers generally to the age of students at the beginning of the calendar year. Students could be one year older than the age indicated when they graduate at the end of the school year. Twenty-five is used as the upper age limit for completing secondary education because, across OECD countries, more than 95% of graduates from upper secondary general programmes in 2017 were under 25 (see Education at a Glance Database). People who graduate from this level at age 25 or older are usually enrolled in second-chance programmes. At the post-secondary non-tertiary level, 30 is considered to be the upper age limit for graduation.

Please see Annex 3 for country-specific notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

#### Source

Data refer to the academic year 2016/17 and are based on the UNESCO-UIS/OECD/EUROSTAT data collection on education statistics administered by the OECD in 2018 (for details, see Annex 3 at <a href="https://doi.org/10.1787/f8d7880d-en">https://doi.org/10.1787/f8d7880d-en</a>).

#### Note regarding data from Israel

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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## **Indicator B3 Tables**

- Table B3.1
   Profile of upper secondary graduates from vocational programmes (2017)
- **Table B3.2**Profile of post-secondary non-tertiary graduates from vocational programmes (2017)
- Table B3.3Trends in upper secondary and post-secondary non-tertiary first-time graduation rates (2005,<br/>2010 and 2017)

Cut-off date for the data: 19 July 2019. Any updates on data can be found on line at <u>http://dx.doi.org/10.1787/eag-data-en</u>. More breakdowns can be found at <u>http://stats.oecd.org/</u>, Education at a Glance Database.

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#### B3. WHO IS EXPECTED TO GRADUATE FROM UPPER SECONDARY EDUCATION? | 189

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Denmark         28         11         48         29         12         66         10         87         4           Entonia         55         53         19         1         48         22         19         67         17         83         55           Frince         m         49         20         21         34         20         19         67         17         83         55           Gence         m         44         40         22         33         34         11         12         57         9         86         44           Greece         25         36         18         14         42         18         57         60         11         81         55           teland         m         61         31         m </td <td></td> <td>69</td> <td></td> <td></td> <td></td> <td>40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>66</td>		69				40						66
Extonia         m         35         19         1         49         0         27         94         193         a         65           Finland         55         53         29         18         26         22         19         67         17         83         55           France         m         49         20         21         34         20         19         67         17         7         83         55           Germany         44         40         22         33         34         11         12         57         9         86         91         5           Greece         25         36         18         14         47         15         29         72         8         91         16         55           Iceland         m         61         31         m <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>45</td></th<>												45
Finland         55         53         29         18         26         22         19         67         17         83         56           France         m         49         20         21         34         20         19         63         11         91         63           Greece         25         36         18         14         42         18         5         60         11         81         55           Itengary         20         37         22         14         47         15         29         100         8<         96         55           Itendad         72         28         0         47         12         29         100         8         96         56           Israel         23         43         m         70         47         18         70         30         50         13         a         70           Israel         33         34         17         74         80         27         74         14         78         30           Israel         53         21         33         24         13         6         30         31         78 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>69</td></th<>												69
France         m         49         20         21         34         20         19         63         111         91         64           Germany         44         40         22         33         34         11         12         57         9         88         44           Greece         25         36         18         14         44         18         12         57         9         88         91           Greece         25         36         18         14         47         15         29         72         8         91         57           Iteland         m         61         31         m												58
Germany         44         40         22         33         34         11         12         57         9         86         44           Greece         25         36         18         14         42         18         57         60         11         81         55           Iterand         20         37         22         14         47         55         23         72         8         95         55           Israel         22         37         28         0         47         12         22         10         8         95         55           Israel         42         50         17         m												63
Greece         25         36         18         14         42         18         5         60         11         81         5           Hungary         20         37         22         14         47         5         29         72         8         91         5           Iteland         m         61         31         m												47
Hungary         20         37         22         14         47         5         29         72         8         91         5           Iceland         22         37         28         0         47         12         22         100         8         91         5           Israel         42         50         17         m												
iceland         22         37         28         0         47         12         22         100         8         96         5           ireland         m         61         31         m <td></td> <td>54</td>												54
Inteland         m         fm         m		20										57
Israel         42         50         17         m												53
Itahy         58         39         m         29         25         0         30         50         13         a         55           Japan         23         43         m         30         42         6         8         62         11         83         8           Korea         18         42         18         27         44         2         5         74         14         78         68           Lithuania         16         34         21         17         48         0         27         48         3         a         7           Latvia         25         444         21         15         37         0         24         75         10         71         7           Laxemborg         60         33         50         18         m									m			m
Japan         23         43         m         30         42         6         8         62         11         833         8           Korea         18         42         18         27         44         2         5         74         14         78         6           Latvia         25         44         21         17         48         0         27         48         3         a         77           Latvia         25         44         21         15         37         0         24         75         10         71         7           Latvia         25         44         21         33         24         13         6         65         17         81         6           Mexicenands         54         50         22         20         18         23         22         54         10         88         4           NewZealand         m         63         33         12         13         23         24         66         17         88         44           Norway         35         40         28         77         42         26         18         77         43 <td></td> <td></td> <td></td> <td>17</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>m</td> <td>m</td>				17							m	m
Corea         18         42         18         27         44         2         5         74         14         78         66           Lithuania         16         34         21         17         48         0         27         48         3         a         7           Laxia         25         44         21         15         37         0         24         75         10         71         7           Laxembourg         60         53         21         33         24         13         6         655         17         81         6           Vektoriands         54         50         22         20         18         23         22         54         10         88         4           Vektoriands         54         50         22         20         18         20         12         37         0         27         63         12         56         36         36         48         20         14         18         7         48         36         36         36         12         56         5         56         56         56         56         56         56         56         56	taly <sup>2</sup>	58		m								54
Lithuania         16         34         21         17         48         0         27         48         3         a         7           Latvia         25         44         21         15         37         0         24         75         10         71         77           Luxembourg         60         53         21         33         24         13         6         65         17         81         6           Mexice         33         50         18         m	Japan	23		m			6	8				82
Latvia         25         44         21         15         37         0         24         75         10         71         7           Luxembourg         60         53         21         33         24         13         6         65         17         81         66           Mexico         33         50         18         m	Korea				27		2		74		78	65
Luxembourg         60         53         21         33         24         13         6         65         17         81         6           Mexico         33         50         18         m<	Lithuania	16	34	21	17	48	0	27	48	3	а	78
Mexico         33         50         18         m	Latvia	25	44	21			0	24	75	10	71	70
Mexico         33         50         18         m	Luxembourg	60	53	21	33	24	13	6	65	17	81	65
New Zealand         m         63         33         12         13         6         18         76         15         78         6           Norway         35         40         28         7         42         26         18         77         8         84         33           Poland         45         39         20         12         37         0         27         63         12         56         66           Portugal         36         48         20         16         19         12         24         66         17         86         55           Stovak Republic         71         44         19         16         38         8         24         71         10         84         66           Spain         33         41         18         8         44         18         20         58         9         72         68           Sweden         33         41         18         8         44         18         20         58         9         72         89         55           Turkey         50         50         18         16         29         26         8	Mexico	33	50	18	m	m	m	m	m	m	m	m
New Zealand         m         63         33         12         13         6         18         76         15         78         6           Norway         35         40         28         7         42         26         18         77         8         84         33           Poland         45         39         20         12         37         0         27         63         12         56         66           Portugal         36         48         20         16         19         12         24         66         17         86         55           Stovak Republic         71         44         19         16         38         8         24         71         10         84         66           Spain         33         41         18         8         44         18         20         58         9         72         68           Switzerland         m         46         22         34         32         15         9         59         12         89         55           Turkey         50         50         18         16         29         26         8         51	Netherlands	54	50						54			46
Norway         35         40         28         7         42         26         18         77         8         84         33           Poland         45         39         20         12         37         0         27         63         12         56         66           Portugal         36         48         20         16         19         12         24         66         17         86         55           Slovak Republic         71         444         19         16         38         8         24         71         10         84         66           Slovak Republic         67         45         19         13         34         13         16         63         11         73         66           Spain         33         49         25         13         18         20         14         62         8         77         4           Sweden         33         41         18         8         44         18         20         58         9         72         66           Writelad         m         45         22         34         32         15         14         53 <td>New Zealand</td> <td></td> <td>69</td>	New Zealand											69
Poland         45         39         20         12         37         0         27         63         12         56         66           Portugal         36         48         20         16         19         12         24         66         17         86         55           Slovak Republic         71         44         19         16         38         8         24         71         10         84         66           Slovania         67         45         19         13         34         13         16         63         11         73         66           Sweden         33         41         18         8         44         18         20         58         9         72         66           Switzerland         m         46         22         34         32         15         9         59         12         89         55           United Kingdom         63         52         21         16         29         26         8         51         13         81         66           United Kingdom         63         52         21         18         34         12         17												39
Portugal         36         48         20         16         19         12         24         66         17         86         55           Slovak Republic         71         444         19         16         38         8         24         71         10         84         66           Slovenia         67         45         19         13         34         13         16         63         111         73         66           Spain         33         49         25         13         18         20         14         62         8         77         44           Sweden         33         411         18         8         44         18         20         58         9         72         66           Switzerland         m         46         22         34         32         15         14         53         6         80         55           Junited Kingdom         63         52         21         12         8         15         14         53         6         80         55           United States         a         a         a         a         a         a         a         <												69
Slovak Republic         71         44         19         16         38         8         24         71         10         84         66           Slovenia         67         45         19         13         34         13         16         63         11         73         66           Spain         33         49         25         13         18         20         14         62         8         77         4           Sweden         33         41         18         8         44         18         20         58         9         72         6           Switzrland         m         46         22         34         32         15         9         59         12         89         55           Tarkey         50         50         18         16         29         26         8         51         13         81         6           United Kingdom         63         52         21         12         8         15         14         53         6         80         5           DeCD average         40         46         22         18         34         12         17         65<												58
Slovenia         67         45         19         13         34         13         16         63         11         73         66           Spain         33         49         25         13         18         20         14         62         8         77         4           Sweden         33         41         18         8         44         18         20         58         9         72         66           Switzerland         m         46         22         34         32         15         9         59         12         89         55           Junited Kingdom         63         52         21         12         8         15         14         53         6         80         55           Junited States         a <td>-</td> <td></td> <td>62</td>	-											62
Spain         33         49         25         13         18         20         14         62         8         77         4           Sweden         33         41         18         8         44         18         20         58         9         72         66           Switzerland         m         46         22         34         32         15         9         59         12         89         55           Switzerland         m         46         22         34         32         15         9         59         12         89         55           United Kingdom         63         52         21         12         8         15         14         53         6         80         57           United States         a <td></td> <td>63</td>												63
Sweden         33         41         18         8         44         18         20         58         9         72         66           Switzerland         m         46         22         34         32         15         9         59         12         89         55           Turkey         50         50         18         16         29         26         8         51         13         81         66           Jnited Kingdom         63         52         21         12         8         15         14         53         6         80         55           Jnited States         a </td <td></td> <td>47</td>												47
Switzerland         m         46         22         34         32         15         9         59         12         89         55           Turkey         50         50         18         16         29         26         8         51         13         81         66           United Kingdom         63         52         21         12         8         15         14         53         6         80         55           United States         a <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>62</td></t<>												62
Turkey         50         50         18         16         29         26         8         51         13         81         66           United Kingdom         63         52         21         12         8         15         14         53         6         80         55           United States         a </td <td></td> <td>55</td>												55
United Kingdom         63         52         21         12         8         15         14         53         6         80         55           United States         a						32						63
United StatesaaaaaaaaaaaaaaaDECD average4046221834121765128286EU23 average4645221833112063128166ArgentinammmmmmmmmmmBrazil85721221811462327766ChinammmmmmmmmmmCosta Rica245318mmmmmmmmIndonesiammmmmmmmmmmmRussian Federation4642m1838618mmmmSaudi Arabiammmmmmmmmmm												
OECD average         40         46         22         18         34         12         17         65         12         82         66           EU23 average         46         45         22         18         33         11         20         63         12         82         66           Argentina         m												51
EU23 average         46         45         22         18         33         11         20         63         12         81         66           Argentina         m <t< td=""><td>United States</td><td></td><td>а</td><td></td><td>a</td><td></td><td>а</td><td></td><td>a</td><td></td><td></td><td>a</td></t<>	United States		а		a		а		a			a
Argentina         m		40	46	22	18	34	12		65	12	82	61
Brazil         8         57         21         22         18         11         4         62         32         77         66           China         m	EU23 average	46	45	22	18	33	11	20	63	12	81	60
Brazil         8         57         21         22         18         11         4         62         32         77         66           China         m	Argentina	m	m	m	m	m	m	m	m	m	m	m
m         m		8	57	21	22	18	11	4	62	32	77	66
Costa Rica         24         53         18         m         <			m			m	m	m			m	m
India         m <td></td> <td>m</td>												m
Indonesia         m												m
Russian Federation         46         42         m         18         38         6         18         m												m
Saudi Arabia m m m m m m m m m m												m
												m
												m
	ooutii Airica	m		m	m	m	m	m	m	m	111	m

#### Table B3.1. Profile of upper secondary graduates from vocational programmes (2017)

Note: This table does not include data for all fields of study. The data for other fields are available at http://stats.oecd.org/, Education at a Glance Database.

1. Year of reference 2016.

2. Includes post-secondary non-tertiary level.

Source: OECD/UIS/Eurostat (2019). See Source section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>). Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink ms https://doi.org/10.1787/888933977942

#### **190** | B3. WHO IS EXPECTED TO GRADUATE FROM UPPER SECONDARY EDUCATION?

	-	ø		Distribution of graduates by field of study Share of female graduates by field of study									
	Percentage of first- time graduates who obtained a vocational qualification	Percentage of female graduates	Average age	Business, administration and law	Engineering, manufacturing and construction	Health and welfare	Services	Business, administration and law	Engineering, manufacturing and construction	Health and welfare	Services		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
Countries Australia <sup>1</sup>													
Australia <sup>1</sup>	100	50	37	23	24	27	10	57	10	70	51		
Austria	100	75	33	8	1	63	1	53	17	79	53		
Belgium	100	50	22	12	26	13	36	56	9	82	69		
Canada	m	m	m	m	m	m	m	m	m	m	m		
Chile	a	а	а	а	а	а	a	а	а	a	а		
Colombia	а	а	а	а	а	а	а	а	а	а	а		
Czech Republic	19	44	m	m	m	m	m	m	m	m	m		
Denmark	100	40	35	96	0	0	1	40	a	a	100		
Estonia	m	62	31	36	24	1	25	91	35	78	41		
Finland	100	59	42	58	19	6	13	57	56	86	61		
France	m	m	m	7	3	16	1	57	29	90	7		
Germany	90	60	24	24	19	43	7	65	14	81	65		
Greece	m	62	25	7	6	31	41	66	25	83	60		
Hungary	100	53	24	19	20	23	17	76	11	78	58		
Iceland	79	32	37	11	45	1	33	49	9	100	49		
Ireland	m	53	30	0	25	34	9	64	1	96	43		
Israel	a	а	а	а	а	а	а	а	а	а	а		
Italy	m	m	m	m	m	m	m	m	m	m	m		
Japan	m	m	m	m	m	m	m	m	m	m	m		
Korea	a	а	а	а	а	а	а	в	а	а	а		
Lithuania	100	63	29	15	19	22	28	83	20	91	70		
Latvia	100	52	29	24	27	12	23	61	18	85	65		
Luxembourg	100	19	29	0	80	0	15	а	4	а	100		
Mexico	a	а	а	a	a	а	a	a	a	а	a		
Netherlands	a	а	а	а	a	а	а	a	а	а	а		
New Zealand	100	61	30	16	10	13	19	72	17	82	65		
Norway	100	66	33	25	5	29	25	88	15	91	31		
Poland	100	75	28	13	0	44	27	80	20	83	69		
Portugal	100	39	26	5	14	0	68	60	10	a	46		
Slovak Republic	100	50	28	13	15	18	39	60	9	83	31		
Slovenia	a	a	8	8	а	a	8	a	8	a	a		
Spain	100	60	38	34	13	25	12	67	31	75	73		
Sweden	87	56	33	10	24	22	12	75	22	95	49		
Switzerland	а	а	8	8	a	а	8	а	a	а	8		
Turkey	а	а	а	8	a	a	в	a	a	а	В		
United Kingdom	a	a	a	a	a	a	a	a	a	a	a		
United States	100	57	m	10	20	34	19	65	7	84	62		
OECD average	94	54	31	20	19	21	21	66	18	85	57		
EU23 average	93	54	30	21	19	21	21	65	19	84	59		
Argentina Brazil China	m	m	m	m	m	m	m	m	m	m	m		
Brazil	100	57	28	26	22	29	10	64	18	84	60		
China	m	m	m	m	m	m	m	m	m	m	m		
Costa Rica	а	а	а	а	a	а	a	a	a	а	a		
India	m	m	m	m	m	m	m	m	m	m	m		
Indonesia	m	m	m	m	m	m	m	m	m	m	m		
Russian Federation	100	35	25	5	58	4	20	82	26	92	37		
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m		
South Africa	m	m	m	m	m	m	m	m	m	m	m		
G20 average	m	m	m	m	m	m	m	m	m	m	m		

#### Table B3.2. Profile of post-secondary non-tertiary graduates from vocational programmes (2017)

Note: This table does not include data for all fields of study. The data for other fields are available at <a href="http://stats.oecd.org/">http://stats.oecd.org/</a>, Education at a Glance Database. 1. Year of reference 2016.

Source: OECD/UIS/Eurostat (2019). See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

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

StatLink ms https://doi.org/10.1787/888933977961

#### B3. WHO IS EXPECTED TO GRADUATE FROM UPPER SECONDARY EDUCATION? | 191

		Upper secondary							Post-secondary non-tertiary						
	All ages			Your	Younger than 25 years			All ages			Younger than 30 years				
	2005	2010	2017	2005	2010	2017	2005	2010	2017	2005	2010	2017			
Countries	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)			
Countries Australia								40	0		7	2			
Australia	m	m	m	m	m	m	m	16	9	m	7	3			
Austria	m	87	85	m	84	79	m	7	7	m	4	3			
Belgium	m	m	m	m	m	m	m	m	5	m	m	5			
Canada	80	85	91	75	81	85	m	m	m	m	m	m			
Chile	83	86	92	77	82	87	8	8	8	a	8	a			
Colombia	m	m	m	m	m	m	m	m	m	m	m	m			
Czech Republic	116 4	1104	80	m	m	78	x(1)	x(2)	30	m	m	m			
Denmark	83	85	91	74	76	80	1	1	0	1	0	0			
Estonia	m	m	m	m	m	m	m	m	m	m	m	m			
Finland	94	95	100	85	85	89	6	7	9	1	1	1			
France	m	m	m	m	m	m	m	m	m	m	m	m			
Germany	78	83	81	m	m	76	23	25	24	m	m	22			
Greece	96	89	95	96	89	93	m	m	m	m	m	m			
Hungary	84	86	84	80	82	79	20	18	21	18	16	18			
Iceland	m	m	82	m	m	68	m	m	14	m	m	6			
Ireland	92	86	m	90	85	m	14	10	m	14	7	m			
Israel	89	91	90	89	91	90	m	m	m	m	m	m			
	85	85	96 4	67	67		6	4		4	2				
Italy			98			m			x(3)			m			
Japan	m	m		m	m	m	m	m	m	m	m	m			
Korea	94	92	95	m	m	95	a	a	a	a	8	a			
Latvia	m	89	89	m	88	84	m	3	10	m	2	8			
Lithuania	82	94	87	78	89	84	8	9	21	8	7	15			
Luxembourg	74	70	81	72	68	78	m	2	1	m	1	1			
Mexico	40	45	61	39	44	60	а	a	а	а	а	a			
Netherlands	m	m	89	m	m	84	m	m	а	m	m	a			
New Zealand	95	91	95	86	80	90	26	29	22	12	18	14			
Norway	90	87	93	74	75	82	5	10	4	3	7	2			
Poland	m	84	88	m	83	85	15	13	14	11	10	10			
Portugal	52	106	85	49	66	78	0	3	1	0	3	1			
Slovak Republic	86	86	72	84	84	71	12	10	7	11	8	5			
Slovenia	85	94	95	72	83	93	а	а	а	а	8	а			
Spain	56	61	81	53	57	75	a	a	3	a	а	1			
Sweden	76	75	69	76	75	69	1	3	6	0	2	3			
Switzerland	m	m	m	m	m	m	m	m	m	m	m	m			
Turkey	48	54	75	48	54	72	8	a	а	a	8	a			
United Kingdom	87	88	87	m	m	81	a	a	a	a	a	a			
United States	74	77	85	74	77	85	17	22	22	m	m	m			
				14											
OECD average Average for countries	81	84	86	m	77	81	m	11	12	m	6	7			
with available data for all reference years	80	84	86	m	76	78	m	6	7	m	3	3			
EU23 average	83	87	86	m	79	81	10	8	11	m	5	7			
Argentina <sup>1</sup>	m	m	65	m	m	m	m	m	m	m	m	m			
Brazil	m	m	67	m	m	61	m	m	6	m	m	3			
China	m	m	83	m	m	m	m	m	m	m	m	m			
Costa Rica	m	m	35	m	m	33	m	m	а	m	m	a			
India	m	m	30	m	m	m	m	m	m	m	m	m			
Indonesia	m	m	66	m	m	m	a	а	а	а	а	a			
Russian Federation	89	97	90	m	m	m	7	12	3	m	m	m			
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m			
South Africa1	m	m	43	m	m	m	m	m	m	m	m	m			

#### Table B3.3. Trends in upper secondary and post-secondary non-tertiary first-time graduation rates (2005, 2010 and 2017)

1. Year of reference 2016 instead of 2017. **Source:** OECD/UIS/Eurostat (2019). See Source section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>). Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink msp https://doi.org/10.1787/888933977980



From: Education at a Glance 2019 OECD Indicators

Access the complete publication at: https://doi.org/10.1787/f8d7880d-en

#### Please cite this chapter as:

OECD (2019), "Who is expected to graduate from upper secondary education?", in *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/5663738d-en

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