

C 1 Education and Qualification³²⁶

The percentage of the working population with tertiary qualifications (ISCED 5+6 and ISCED 7+8) was 32.6 percent in Germany in 2019, significantly lower than in most comparative countries (C 1-1). In terms of higher academic qualifications (ISCED 7+8), Germany's share of 14.7 percent was also around 2 percentage points below the average for the countries under consideration. By contrast, with 56.7 percent in a European comparison, Germany has the highest proportion of intermediate degrees (ISCED 3** and ISCED 4) that formally allow entry to the tertiary level.

The share of new tertiary students in the age-matched population of under-25s (C 1-2) was 52 percent in Germany in 2018, 2 percentage points below the OECD average. The adjusted rate for under-25s and excluding international new tertiary students in Germany was 45 percent, the same level as the year before.

Due to demographic factors, the number of qualified school-leavers in 2019 has decreased by almost 10,000 to 422,784 compared to the previous year. In contrast, the rate of qualified school leavers, i.e., the number of school-leavers qualified for higher education as a percentage of the relevant age group, was 50.6 percent in 2019, the same level as in 2018 (C 1-3). According to the new projections of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (Kultusministerkonferenz, KMK), the rate of qualified school-leavers will remain at about this level and reach 50 percent in 2030.

The number of students without German citizenship who gained their university entrance qualification in Germany (Bildungsinländer) fell slightly in 2019 compared to the previous year from 92,508 to 91,699 (C 1-4). On the other hand, the total number of foreign students in Germany increased once again. The number of foreign students, i.e., students without German citizenship who gained their university entrance qualification abroad (Bildungsausländer) enrolled at German tertiary education institutions, was 319,902 in 2019, around 6 percent higher than in 2018.

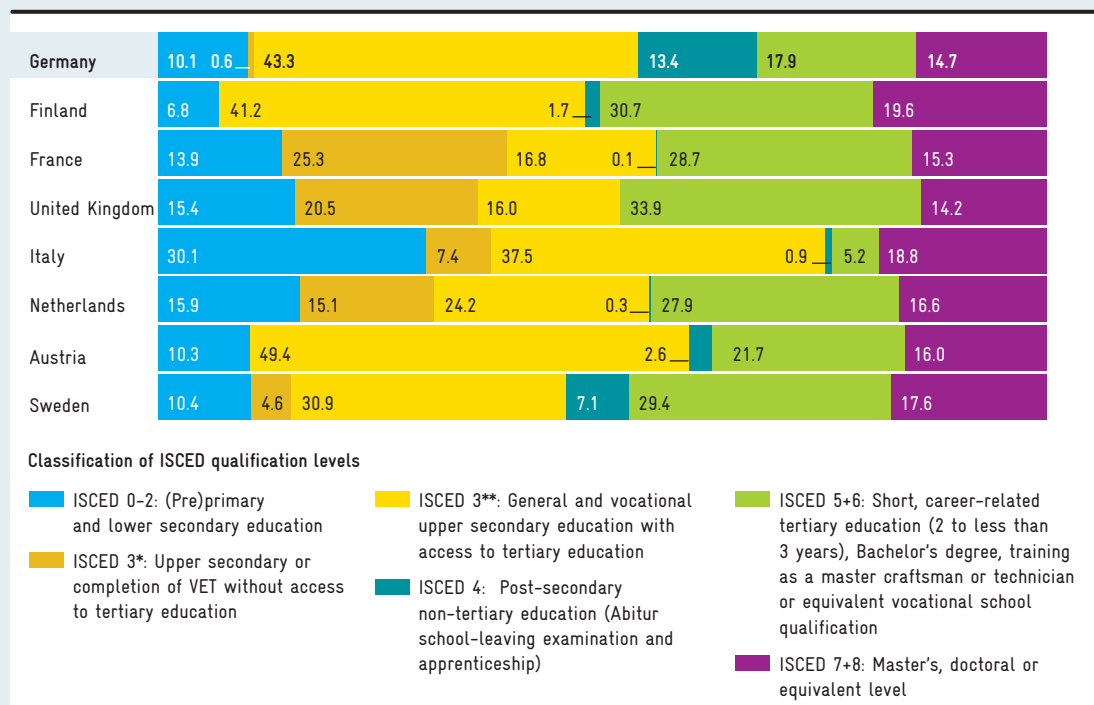
The number of first-time graduates (C 1-5) has increased from 303,155 in 2018 to 310,747 in 2019. Women accounted for 53.6 percent of first-time graduates in 2019, 0.6 percentage points higher than in 2018. Once again, the proportion of first-time graduates who completed their degree at a university fell slightly, from 53.0 percent to 52.8 percent.

The rate of people aged 25-64 who participated in continuing education and training (CET) in the last four weeks (C 1-6) increased slightly compared to 2018 and was 5.0 percent in 2019. The rates of low-skilled and medium-skilled workers with a CET participation increased by 0.2 percentage points each. The participation of businesses in CET reached 54.5 percent in 2018, 1.5 percentage points higher than the year before.

Qualification levels of gainfully employed persons in selected countries in 2019 in percent

Fig. C 1-1

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The ISCED education levels are recognized UNESCO standards for international comparisons of country-specific education systems.

Source: Eurostat, European Union Labour Force Survey. Calculations by CWS in Gehrke et al. (2021).

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Number of new tertiary students in the age-matched population of under-25s in selected countries 2013-2018 in percent

Tab. C 1-2

Download data

Countries	2013 ¹⁾	2014 ¹⁾	2015 ¹⁾	2016 ¹⁾	2017 ¹⁾	2018 ¹⁾	2013 ²⁾	2014 ²⁾	2015 ²⁾	2016 ²⁾	2017 ²⁾	2018 ²⁾
Belgium	64	64	66	69	73	68	54	57	59	62	67	62
Germany	51	54	53	51	52	52	46	48	46	45	45	45
Finland	45	44	46	46	47	47	41	40	42	42	43	43
United Kingdom	48	54	56	60	61	63	42	47	49	52	53	54
Italy	40	40	42	43	46	48	-	-	41	41	43	46
Japan	-	-	-	-	71	73	-	-	-	-	-	-
Sweden	42	45	45	44	45	46	40	42	41	40	41	41
Switzerland ³⁾	48	55	55	55	56	48	-	47	47	47	47	40
USA	48	48	48	47	46	46	47	47	46	46	44	44
OECD average	-	-	-	-	-	54	50	51	48	49	50	49

University entry rate: number of new tertiary students under 25 years of age entering tertiary education for the first time, as a percentage of the population of the corresponding age.

¹⁾ The university entry rates for under-25s are given according to the ISCED 2011 classification for levels 5, 6, 7 and 8.

²⁾ Adjusted rate for under-25s, excluding new international tertiary students.

³⁾ Since 2018, changed calculation: Only new entrants to the tertiary level (levels 5 to 7) are taken into account; before, there were some double counts.

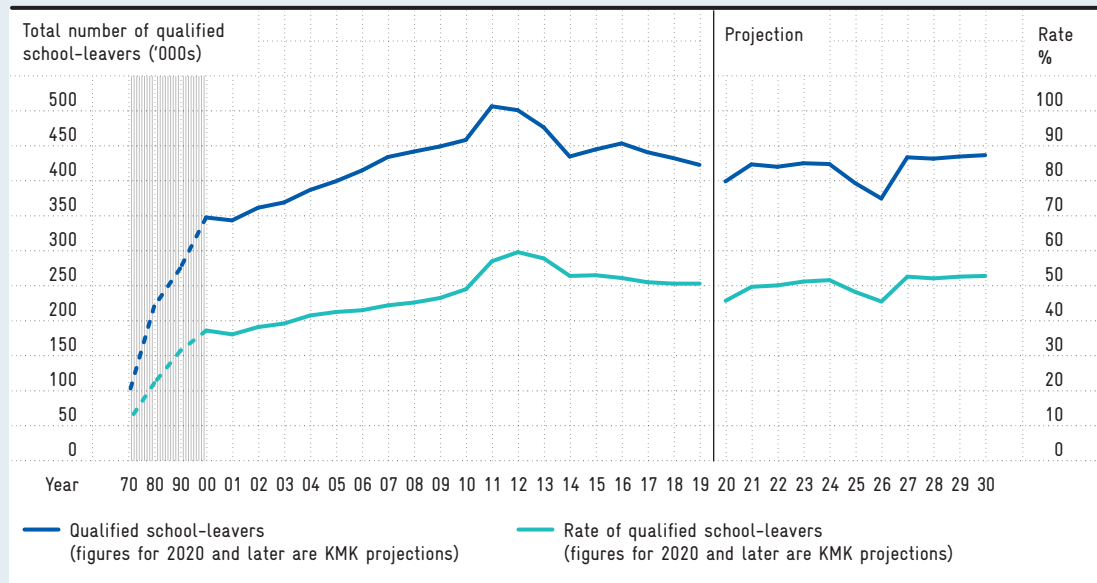
Source: OECD (Ed.): Education at a Glance 2020 as well as OECD.Stat database in Gehrke et al. (2021).

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Fig. C 1-3

School-leavers qualified for higher education in Germany 1970–2030

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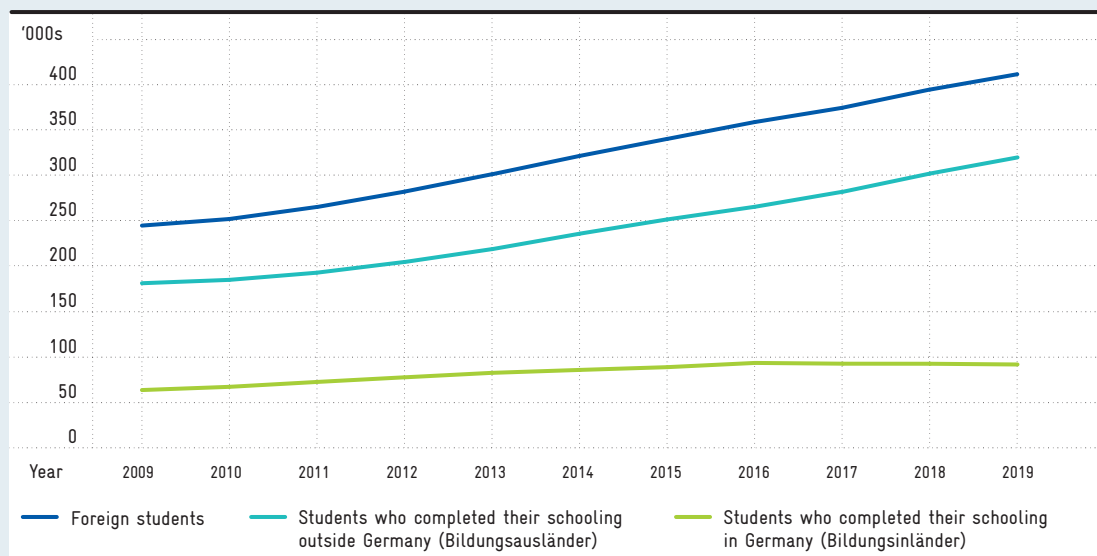


School-leavers qualified for higher education: either with a 'general' or a 'technical' school-leaving certificate (in Germany: Abitur).
 Rate of qualified school-leavers: number of school-leavers qualified for higher education as a percentage of the relevant age group.
 Source of actual figures: Federal Statistical Office in Gehrke et al. (2021).
 Source of forecast figures: Statistical publications by the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz, KMK) in Gehrke et al. (2021).
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Fig. C 1-4

Foreign students at German tertiary education institutions 2009–2019¹⁾

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Foreign students are defined as persons without German citizenship. They can be divided into students who attained their higher-education entrance qualification in Germany (Bildungsinländer), and those who attained this qualification abroad (Bildungsausländer).

¹⁾ The data are submitted annually by the higher education institutions to the statistical offices in the winter semester after the end of the enrolment period.

Source: Federal Statistical Office, research by DZHW-ICE in Gehrke et al. (2021).

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First-time graduates and subject-structure rate 2015–2019

Tab. C 1-5

	2015	2016	2017	2018	2019
Total number of graduates	317,102	315,168	311,441	303,155	310,747
Percentage of women	51.1	52.0	52.6	53.0	53.6
Percentage of graduates from universities	56.8	54.7	53.9	53.0	52.8
Humanities	37,135	34,886	32,205	30,491	30,660
Percentage of subject group	11.7	11.1	10.3	10.1	9.9
Legal, economics and social sciences	128,273	132,737	134,605	131,832	135,165
Share subject group in percent	40.5	42.1	43.2	43.5	43.5
Human medicine, health sciences	17,935	19,521	20,308	20,101	21,957
Percentage of subject group	5.7	6.2	6.5	6.6	7.1
Agriculture, forestry and nutritional sciences, veterinary medicine	7,442	6,978	7,148	7,252	7,226
Percentage of subject group	2.3	2.2	2.3	2.4	2.3
Art, art history	11,514	11,268	11,119	10,892	10,905
Percentage of subject group	3.6	3.6	3.6	3.6	3.5
Mathematics, natural sciences	30,001	28,081	26,261	25,677	26,765
Share subject group in percent	9.5	8.9	8.4	8.5	8.6
Engineering	81,300	78,552	76,133	73,849	74,868
Share subject group in percent	25.6	24.9	24.4	24.4	24.1

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First-degree graduates and subject-structure rate: The subject-structure rate indicates the percentage of first-time graduates who have completed their degree course in a particular subject or group of subjects. First-degree graduates are persons who have successfully completed a first degree.

Source: Federal Statistical Office as well as research by DZHW-ICE in Gehrke et al. (2021).

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Tab. C 1-6

Download
data

Participation of individuals and companies engaging in continuing education and training (CET) 2009–2019 in percent

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
a) Individual CET rate	5.0	4.9	4.9	5.1	4.9	4.8	4.9	5.2	5.0	4.9	5.0
Gainfully employed persons by qualification level	5.8	5.6	5.6	5.9	5.6	5.5	5.5	5.8	5.4	5.3	5.4
low (ISCED 0-2)	1.4	1.3	1.0	1.4	1.4	1.3	1.2	1.5	1.5	1.3	1.5
medium (ISCED 3-4)	4.2	3.9	3.9	4.1	3.9	4.2	4.3	4.5	4.2	4.0	4.2
high (ISCED 5-8)	10.6	10.5	10.3	10.6	10.1	9.4	9.3	9.7	8.9	8.9	8.9
Unemployed persons by qualification level	4.3	3.9	4.6	3.8	3.6	3.7	3.7	4.2	5.3	5.1	4.5
low (ISCED 0-2)	2.7	3.5	3.6	3.1	2.9	2.8	2.6	3.3	5.1	4.9	3.3
medium (ISCED 3-4)	4.0	3.2	4.0	3.6	3.4	3.3	3.4	3.6	4.3	4.2	3.0
high (ISCED 5-8)	8.4	8.3	10.0	6.6	5.4	6.4	6.3	7.2	8.6	7.7	9.8
Inactive persons by qualification level	1.9	2.0	1.9	1.6	1.8	1.8	2.0	2.4	3.2	2.9	2.7
low (ISCED 0-2)	1.8	1.6	1.5	1.4	1.4	1.3	1.7	2.5	4.0	3.8	3.4
medium (ISCED 3-4)	1.5	1.8	1.9	1.4	1.5	1.6	1.6	1.8	2.2	2.0	2.0
high (ISCED 5-8)	3.4	3.6	2.7	2.8	3.5	3.4	3.7	4.4	4.9	4.2	3.9
b) Corporate participation in CET*	44.6	44.1	52.6	53.1	52.1	53.6	52.8	53.2	53.0	54.5	-
By sector											
Knowledge-intensive manufacturing	52.6	55.9	62.9	65.5	66.7	69.9	70.6	64.0	65.0	63.0	-
Non-knowledge-intensive manufacturing	32.5	33.3	41.2	43.2	41.8	43.0	44.5	46.3	45.5	46.0	-
Knowledge-intensive services	58.7	57.1	68.7	67.2	67.4	67.0	67.5	69.2	66.1	69.1	-
Non-knowledge-intensive services	38.0	37.5	44.9	45.3	44.3	46.0	43.8	43.7	45.2	46.8	-
Non-commercial industry	51.9	51.2	59.0	60.3	58.4	61.9	60.1	59.3	59.3	60.0	-
By company size											
< 50 employees	42.5	41.8	50.5	50.9	49.8	51.4	50.5	50.8	50.6	51.9	-
50–249 employees	81.3	83.3	90.8	89.7	90.1	90.8	89.3	89.5	89.0	92.0	-
250–499 employees	92.0	93.3	95.9	96.5	97.0	96.9	96.8	96.4	96.0	97.2	-
≥ 500 employees	96.0	97.9	98.4	97.8	99.1	99.1	97.1	97.9	97.2	97.9	-

Individual CET rate: Percentage of people who participated in CET in the last four weeks prior to the time of the survey. Corporate participation in CET: percentage of companies where employees were released for CET or whose CET costs were paid. On ISCED cf. C 1-1. Population a): All persons aged between 25 and 64.

Population b): All establishments with at least one employed person subject to social security.

* The data for corporate CET participation in 2019 were not yet available by the editorial deadline.

Source a): European Union Labour Force Survey (special evaluation). Calculations by CWS in Gehrke et al. (2021). Data as from 2016 relating to unemployed and inactive persons are comparable to previous years only to a limited extent due to methodological changes and stricter confidentiality rules.

Source b): IAB Establishment Panel (special evaluation). Calculations by CWS in Gehrke et al. (2021).

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