

HEAD OFFICE OF THE GERMAN SCIENCE AND HUMANITIES COUNCIL

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**BASIC DATA ON UNIVERSITIES AND RESEARCH ESTABLISHMENTS IN GERMANY**

**Number of universities (winter semester 2022/23, without colleges of public administration):** 389 (universities: 106, colleges of education: 6, colleges of theology: 16, art academies: 53, universities of applied sciences: 208), of which 111 (29 %) are privately-funded and 36 (9 %) are church-funded.

12.7 % of students in higher education in Germany are enrolled at private universities, 1.1 % at church universities (winter semester 2022/2023).

149 of the German universities (38 %) have the right to award doctoral degrees. Nine universities (2 %) have the right to award doctoral degrees in cooperation with another university. 55 % of first-year students (249,372) and 62 % of all students (1,787,397) study at a doctorate-granting university (winter semester 2022/2023). 37,585 students (1.3 %), of which 4.240 are first-year students (0.9 %), study at a university which awards cooperative doctoral degrees.

Universities (without colleges of public administration)	2018	2019	2020	2021	2022
<b>First-year students</b>   <sup>1</sup>	<b>496,363</b>	<b>491,672</b>	<b>472,189</b>	<b>454,393</b>	<b>456,380</b>
at universities   <sup>2</sup>	294,357	288,066	264,632	253,126	259,282
at universities of applied sciences   <sup>3</sup>	202,006	203,606	207,557	201,267	197,098
<i>Average age</i>   <sup>4</sup>	<i>19.4</i>	<i>19.4</i>	<i>19.3</i>	<i>19.4</i>	<i>19.4</i>
<b>Students</b>	<b>2,818,916</b>	<b>2,837,451</b>	<b>2,888,030</b>	<b>2,885,809</b>	<b>2,860,624</b>
at universities   <sup>2</sup>	1,817,366	1,814,305	1,818,035	1,791,332   <sup>11</sup>	1,765,199
at universities of applied sciences   <sup>3</sup>	1,001,550	1,023,146	1,069,995	1,094,477   <sup>12</sup>	1,095,425
<b>Non-German students</b>	<b>394,491</b>	<b>411,403</b>	<b>416,251</b>	<b>440,613</b>	<b>457,847</b>
From Germany	92,383	91,558	91,562	90,985	90,334,
From abroad	302,108	319,845	324,689	349,628	367,513
Non-German students from the EU	101,501	100,950	96,335	102,775	102,248
<b>German students abroad</b>	<b>135,100</b>	<b>137,900</b>	<b>133,400</b>	.	.
<b>Degrees</b>	<b>458,905</b>	<b>469,757</b>	<b>433,905</b>	<b>473,059</b>	.
at universities   <sup>2</sup>	281,361	286,850	257,816	281,654	.
of which bachelor degrees   <sup>5</sup>	106,055	111,619	98,853	108,185	.
of which master degrees   <sup>6</sup>	93,853	98,616	89,801	95,422	.
of which teaching degrees   <sup>7</sup>	41,326	46,166	42,940	47,958	.
at universities of applied sciences   <sup>3</sup>	177,544	182,907	175,389	191,405	.
of which bachelor degrees   <sup>5</sup>	130,474	134,173	128,983	140,392	.
of which master degrees   <sup>6</sup>	43,830	46,608	44,600	49,181	.
<i>Average duration of study (bachelor)</i>   <sup>8</sup>	<i>7.1</i>	<i>7.1</i>	<i>7.2</i>	<i>7.2</i>	.
<i>Average graduation age (bachelor)</i>   <sup>4</sup>   <sup>9</sup>	<i>23.4</i>	<i>23.4</i>	<i>23.3</i>	<i>23.3</i>	.
<i>Average graduation age (master)</i>   <sup>4</sup>	<i>26.1</i>	<i>26.1</i>	<i>26.1</i>	<i>26.1</i>	.
<b>Doctorates</b>	<b>27,838</b>	<b>28,690</b>	<b>26,220</b>	<b>28,146</b>	.
<i>Average graduation age (Ph.D.)</i>   <sup>4</sup>	<i>30.5</i>	<i>30.5</i>	<i>30.5</i>	<i>30,6</i>	.
<b>Habilitations</b>	<b>1,529</b>	<b>1,518</b>	<b>1,533</b>	<b>1,621</b>	<b>1,535</b>
<i>Average age (habilitations)</i>   <sup>10</sup>	<i>41.6</i>	<i>41.6</i>	<i>41.3</i>	<i>41.7</i>	<i>41.6</i>

| 1 Students who are enrolled at a university in Germany for the first time (excluding students in the first year of a second degree course at a German university). - | 2 Including colleges of education, colleges of theology and art academies. - | 3 Universities of applied sciences including the dual university Baden-Württemberg. - | 4 Median; including colleges of public administration. - | 5 Without B.Ed. - | 6 Without M.Ed. - | 7 Including B.Ed. and M.Ed. - | 8 First-time graduates; in semesters. - | 9 First-time graduates; in years. - | 10 Arithmetic average. - | 11 Of which 750,913 BA and 403,551 MA students (without B.Ed. and M.Ed.). - | 12 Of which 918,721 BA and 190,823 MA students (without B.Ed. and M.Ed.). -

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Universities   <sup>1</sup>	2015	2016	2017	2018	2019	2020	2021
<b>University staff  <sup>2</sup>  <sup>3</sup></b>	<b>329,355</b>	<b>333,534</b>	<b>337,800</b>	<b>344,948</b>	<b>371,134</b>	<b>383,386</b>	<b>390,544</b>
Professors	24,720	25,051	25,355	25,432	25,817	26,089	25,580
Other scientific staff	102,396	102,862	104,742	106,893	111,468	114,344	110,929
Non-scientific staff	202,239	205,622	207,704	212,623	233,850	242,954	247,315
<b>Staff at universities of applied sciences  <sup>2</sup>  <sup>4</sup></b>	<b>58,684</b>	<b>60,207</b>	<b>61,608</b>	<b>62,132</b>	<b>65,269</b>	<b>66,442</b>	<b>69,360</b>
Professors	17,564	17,793	18,095	18,339	18,762	19,027	18,785
Other scientific staff	18,484	18,541	19,010	19,210	24,584	20,266	19,852
Non-scientific staff	22,637	23,873	24,503	24,584	26,433	27,148	28,454

|<sup>1</sup> Without colleges of public administration. - |<sup>2</sup> In full-time equivalents, without third-party means. - |<sup>3</sup> Including colleges of education, colleges of theology and art academies. - |<sup>4</sup> Including the dual university Baden-Württemberg.

Selected groups of subjects Universities (without colleges of public administration)	Humanities	Law, econom- ics, social sciences	Mathematics, natural sciences	Medicine, health sciences	Engineering
<b>First-year students (2022)  <sup>1</sup></b>	<b>48 342</b>	<b>173 397</b>	<b>50 683</b>	<b>27 527</b>	<b>122 561</b>
<b>Students (2022)  <sup>1</sup></b>	<b>312 204</b>	<b>1 070 571</b>	<b>315 441</b>	<b>201 258</b>	<b>765 377</b>
Non-German students (2021)	40 850	119 897	47 537	21 364	177 365
<b>Degrees (2021)  <sup>2</sup></b>	<b>49 025</b>	<b>191 645</b>	<b>46 990</b>	<b>26 090</b>	<b>124 920</b>
at universities   <sup>3</sup>	47 370	96 725	43 710	15 860	54 500
of which bachelor degrees   <sup>4</sup>	14 365	43 035	16 640	1 450	23 265
of which master degrees   <sup>5</sup>	9 025	33 700	14 270	1 880	29 025
of which teaching degrees   <sup>6</sup>	22 810	9 650	10 235	385	760
at universities of applied sciences	1 655	94 920	3 280	10 230	70 420
of which bachelor degrees   <sup>4</sup>	1 300	71 665	2 190	7 910	48 670
of which master degrees   <sup>5</sup>	345	22 745	1 090	2 225	20 705
<b>Ph.D. students (2022)</b>	<b>21 780</b>	<b>33 600</b>	<b>47 244</b>	<b>54 005</b>	<b>37 585</b>
<b>Doctorates (2021)</b>	<b>1 775</b>	<b>3 891</b>	<b>7 896</b>	<b>8 753</b>	<b>4 560</b>
<b>Habilitations (2022)</b>	<b>213</b>	<b>156</b>	<b>161</b>	<b>870</b>	<b>68</b>
<b>Staff (FTEs without third-party means, 2021)</b>	<b>17 679</b>	<b>44 145</b>	<b>34 587</b>	<b>135 752</b>	<b>46 303</b>
Professors	4 344	13 197	6 046	4 330	12 418
Other scientific staff	10 637	24 621	16 254	45 827	20 640
Non-scientific staff	2 698	6 327	12 287	85 595	13 245
<b>Students per scientific staff (2021)  <sup>7</sup></b>	<b>21.1</b>	<b>28.5</b>	<b>14.1</b>	<b>3.9</b>	<b>23.5</b>
<b>Students per professor (2021)  <sup>8</sup></b>	<b>72.8</b>	<b>81.7</b>	<b>51.9</b>	<b>45.3</b>	<b>62.5</b>
<b>Graduation rates (2021)  <sup>9</sup></b>	<b>75.4</b>	<b>83.0</b>	<b>61.8</b>	<b>89.2</b>	<b>68.3</b>
<b>Third-party means/prof. in Euro (2020)  <sup>10</sup></b>	<b>120,560</b>	<b>79,720</b>	<b>327,890</b>	<b>512,050</b>	<b>217,070</b>

|<sup>1</sup> Preliminary results. - |<sup>2</sup> Without doctorates. - |<sup>3</sup> Including colleges of education, colleges of theology and art academies. - |<sup>4</sup> Without B.Ed. - |<sup>5</sup> Without M.Ed. - |<sup>6</sup> Including B.Ed. and M.Ed. - |<sup>7</sup> Students per scientific staff in full-time equivalents; the overall ratio was 15.6. - |<sup>8</sup> The overall ratio was 62.9. - |<sup>9</sup> Including colleges of public administration; share of students graduating in 2021 and before in relation to first-year students 2013. The overall share was 75.2 %. - |<sup>10</sup> The overall relation was 195,740 Euro.

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Reference date 1 <sup>st</sup> september	2016	2017	2018	2019	2020	2021	2022	2023
<b>Degree programs at universities  <sup>1</sup></b>	<b>12,685</b>	<b>13,128</b>	<b>13,535</b>	<b>13,822</b>	<b>13,868</b>	<b>14,061</b>	<b>14,292</b>	<b>14,613</b>
of which bachelor degree programs	4,977	5,162	5,212	5,307	5,351	5,383	5,487	5,613
of which master degree programs	6,135	6,390	6,706	6,906	6,951	7,089	7,173	7,341
of which state and church degrees	1,285	1,283	1,284	1,284	1,281	1,296	1,344	1,350
<b>Degree programs at universities of applied sciences  <sup>2</sup></b>	<b>5,782</b>	<b>5,883</b>	<b>6,157</b>	<b>6,323</b>	<b>6,491</b>	<b>6,776</b>	<b>7,033</b>	<b>7,279</b>
of which bachelor degree programs	3,494	3,515	3,655	3,733	3,817	3,956	4,109	4,253
of which master degree programs	2,223	2,313	2,446	2,536	2,626	2,772	2,876	2,979

|<sup>1</sup> Including colleges of education, colleges of theology and art academies. - |<sup>2</sup> Including the dual university Baden-Württemberg; without colleges of public administration.

States	First-year students 2022   <sup>1</sup>	Prognosis of first-year students   <sup>2</sup>		R&D share in GDP 2021   <sup>3</sup>	Share of R&D staff 2021   <sup>4</sup>
		2025	2030		
Baden-Württemberg	67,174	61,400	62,200	5.64	29.2
Bavaria	74,771	52,600	64,600	3.39	19.7
Berlin	36,620	28,400	29,700	3.35	18.3
Brandenburg	8,986	8,200	8,600	1.72	10.5
Bremen	6,632	5,400	5,500	3.18	18.3
Hamburg	18,189	11,200	11,500	2.16	15.3
Hessen	37,682	33,700	34,800	3.09	15.9
Meckl.-Vorpommern	5,829	6,400	6,700	1.77	9.4
Lower Saxony	30,254	31,800	31,900	2.72	14.3
North Rhine-Westphalia	103,637	96,600	98,400	2.21	12.0
Rhineland-Palatinate	18,081	20,500	20,500	2.78	13.5
Saarland	5,704	4,100	4,100	1.95	11.2
Saxony	17,652	19,500	21,200	3.09	16.6
Saxony-Anhalt	8,069	9,900	10,300	1.59	8.9
Schleswig-Holstein	10,167	9,500	9,700	1.68	8.8
Thuringia	24,218	10,000	10,500	2.74	13.7
<b>Germany</b>	<b>473,665</b>	<b>409,100</b>	<b>430,200</b>	<b>3.13</b>	<b>16.8</b>

|<sup>1</sup> Including colleges of public administration; first preliminary results. - |<sup>2</sup> By the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany 2021, state universities only. The prognosis for all universities is 468,900 first year students in 2025 and 490,400 in 2030. - |<sup>3</sup> Share of total expenditure for R&D in the GDP of a state in percent. - |<sup>4</sup> Per 1,000 working population.

Science funding (selection) in million Euro	Target 2021			Target 2022		
	Federal	States	Total	Federal	States	Total
German research foundation – basic funding	1,487.8	851.4	2,339.2	1,528.5	880.9	2,409.4
Excellence initiative	399.8	133.3	533.0	399.8	133.3	533.0
University pact 2020 – additional first-year students	1,283.6	1,142.6	2,426.1	839.3	781.6	1,620.9
Research construction projects at universities	316.8	316.8	633.5	316.8	316.8	633.5

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Extra-university research organisations (selection)	Number of institutes	R&D Staff 2021   <sup>1</sup>	of which scientists	Institutional Funding  <sup>2</sup>		
				Federal	States	Total   <sup>7</sup>
Federal Research Agencies with R&D tasks	48	10,663	5,677	2,276.8	-	2,276.8
State and communal research institutes   <sup>3</sup>	.	2,410	1,331	-	.	.
Helmholtz Centres   <sup>4</sup>	18	36,273	18,854	3,579.8	393.2	3,973.0
Max Planck Society   <sup>5</sup>	85	16,130	9,554	1,199.8	882.8	2,082.6
Fraunhofer-Gesellschaft   <sup>4</sup>	74	21,026	10,685	832.6	208.4	1,041.0
Leibniz Association   <sup>5</sup>	97	13,553	6,998	769.5	593.9	1,363.4
Academy Programme   <sup>5</sup>	8	.	.	36.5	36.5	72.9
German National Academy of Sciences Leopoldina   <sup>6</sup>	1	.	.	11.2	2.7	13.9
Wissenschaftskolleg zu Berlin   <sup>5</sup>	1	.	.	3.7	3.7	7.4

| 1 Full-time equivalents. - | 2 Target 2022 in million Euro (Federal Research Agencies with R&D tasks: 2021). - | 3 Without Leibniz Association. - | 4 Funding ratio Federal Government : States 90 : 10. - | 5 The MPG, the Academy programme, the Wissenschaftskolleg zu Berlin and most of the Leibniz institutes are financed fifty-fifty by the Federal Government and the states. - | 6 Funding ratio Federal Government: States 80 : 20. - | 7 Rounding differences.

### Key figures on higher education and R&D expenditure (OECD data for the years 2008, 2009, 2010, 2015, 2016, 2019, 2020, 2021, 2022 and 2023)

	Students per teaching staff	Ratio of first-year students   <sup>1</sup>	Ratio of graduates   <sup>1</sup>	Higher education expenditure/GDP	Share of R&D Staff   <sup>2</sup>	R&D Expenditure				
						in billion Euro   <sup>3</sup>	Percentage of GDP	Percentage Industry   <sup>5</sup>	Percentage State   <sup>5</sup>	of which Defence   <sup>6</sup>
Australia	.	.	54	1.9	.	21.9	1.80	1.39	0.78	6.4
Belgium	21	62	51	1.5	19.8	19.9	3.22	2.03	0.56	0.8
Canada	16	55	49	1.8	20.9	9.7	2.81	1.72	0.83	0.4
Denmark	12	49	35	1.3	16.3	139.4	3.13   <sup>5</sup>	1.96	0.93	5.3
Finland	14	46	40	1.5	20.4	8.2	2.99	1.63	0.81	2.1
France	17	.	50	1.5	16.6	70.0	2.21	1.31	0.73	10.7
<b>Germany</b>	21	50	28	0.9	13.7	37.2	1.48	0.80	0.51	0.6
Italy	10	.	65	1.4	13.4	161.0	3.30	2.57	0.51	1.8
Japan	.	53	66	2.2	13.2	31.4	1.55	0.68	0.48	2.2
Netherlands	15	53	55	1.7	17.4	22.8	2.26	1.32	0.70	3.6
Norway	9	58	55	1.9	17.5	7.8	1.94	1.00	1.04	3.1
Sweden	10	43	49	1.6	18.9	19.1	3.35	2.11	0.82	2.2
Switzerland	14	43	52	1.6	16.9	18.1	3.19	2.06	0.87	0.6
Spain	13	64	49	1.3	11.9	25.1	1.43	0.69	0.54	1.1
UK	13	58	57	2.0	14.5	82.0	2.93	1.68	0.57	7.7
USA	13	43	51	2.5	.	733.2	3.46	2.35	0.69	46.8
<b>OECD</b>	<b>15</b>	<b>52</b>	<b>47</b>	<b>1.4</b>	.	<b>1,656.9</b>	<b>2.71</b>	<b>1.75</b>	<b>0.66</b>	<b>18.5</b>
China	19	.	18	.	7.0	599.0	2.40	1.86	0.47	.
Russia	13	.	62	1.0	10.6	43.6	1.10	0.32	0.74	.

| 1 Percentage of first-year students in higher education among under-25-year-olds. - | 2 Percentage of 25-to-34-year-olds with a degree in higher education among the population of the same age. - | 3 Per 1,000 working population. - | 4 US-\$ Purchasing Power Parity. - | 5 The target of 3.5 % by 2025 was confirmed in the coalition agreement for 2021-2025. - | 6 Based on GDP; the remainder is financed by the private sector. - | 7 Percentage of Defence Budget compared to the total of R&D expenses by the Federal Government and the states.