

**Table 58****Statistical profile of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2019**

(Number, percent, and median years)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
All doctorate recipients (number) <sup>a</sup>	6,585	2,941	1,274	2,370
Sex (%)				
Male	66.3	60.9	58.1	77.6
Female	33.6	39.1	41.8	22.3
Unknown	0.1	0.0	0.1	0.1
Citizenship (%)				
U.S. citizen or permanent resident	59.3	60.6	63.5	55.4
Temporary visa holder	37.8	36.4	33.8	41.6
Unknown	3.0	3.0	2.7	3.0
Marital status (%)				
Never married	48.1	48.9	44.0	49.2
Married	33.7	32.2	36.4	34.0
Marriage-like relationship	7.7	7.5	9.3	6.9
Separated, divorced, widowed	1.4	1.2	2.3	1.3
Unknown	9.2	10.2	8.0	8.6
Bachelor's in same field as doctorate (%) <sup>b</sup>	69.1	73.2	46.8	75.9
Master's earned (%)	53.1	37.2	66.6	65.6
Age at doctorate (median years)	29.5	28.9	30.8	29.6
Time to doctorate (median years)				
From bachelor's	6.9	6.3	8.0	7.0
From graduate school start	6.3	5.8	7.0	6.4
From doctoral program start <sup>c</sup>	5.6	5.3	5.3	5.9
Male doctorate recipients (number)	4,368	1,790	740	1,838
Citizenship (%)				
U.S. citizen or permanent resident	58.4	60.2	58.9	56.3
Temporary visa holder	38.5	36.5	37.7	40.8
Unknown	3.2	3.3	3.4	2.9
Marital status (%)				
Never married	48.1	48.2	44.2	49.6
Married	34.5	33.1	38.0	34.5
Marriage-like relationship	7.0	7.2	7.3	6.6
Separated, divorced, widowed	1.2	0.9	1.8	1.4
Unknown	9.2	10.7	8.8	7.9
Bachelor's in same field as doctorate (%) <sup>b</sup>	70.1	73.2	47.7	76.0
Master's earned (%)	54.4	38.5	68.4	64.4
Age at doctorate (median years)	29.6	29.0	31.0	29.7
Time to doctorate (median years)				
From bachelor's	7.0	6.3	8.1	7.0
From graduate school start	6.3	5.8	7.3	6.4

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Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
From doctoral program start <sup>c</sup>	5.7	5.3	5.4	5.9
Female doctorate recipients (number)	2,213	1,151	533	529
Citizenship (%)				
U.S. citizen or permanent resident	61.2	61.1	70.0	52.6
Temporary visa holder	36.3	36.3	28.3	44.4
Unknown	2.5	2.6	1.7	3.0
Marital status (%)				
Never married	48.1	50.1	43.9	47.8
Married	32.1	30.8	34.3	32.5
Marriage-like relationship	9.0	8.1	12.0	8.1
Separated, divorced, widowed	1.8	1.6	3.0	0.9
Unknown	9.0	9.4	6.8	10.6
Bachelor's in same field as doctorate (%) <sup>b</sup>	67.2	73.2	45.6	76.2
Master's earned (%)	50.5	35.1	64.2	70.1
Age at doctorate (median years)	29.3	28.8	30.3	29.4
Time to doctorate (median years)				
From bachelor's	6.8	6.3	8.0	7.0
From graduate school start	6.0	5.8	6.8	6.3
From doctoral program start <sup>c</sup>	5.3	5.3	5.3	5.9

<sup>a</sup> Includes respondents who did not report sex.<sup>b</sup> A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.<sup>c</sup> Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctorate institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.**Note(s):**

Due to rounding, percentages may not sum to 100.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.