

**Table 3****Higher education R&D expenditures, by R&D field: FYs 2020–21**

(Thousands of current dollars)

Field	2020	2021	% change 2020–21
All R&D fields	86,300,399	89,723,447	4.0
Science	67,569,466	70,316,530	4.1
Computer and information sciences	2,925,725	2,951,923	0.9
Geosciences, atmospheric sciences, and ocean sciences	3,281,457	3,295,883	0.4
Atmospheric science and meteorology	612,784	624,579	1.9
Geological and earth sciences	1,159,846	1,242,339	7.1
Ocean sciences and marine sciences	1,136,023	1,035,519	-8.8
Geosciences, atmospheric sciences, and ocean sciences nec	372,804	393,446	5.5
Life sciences	49,622,337	52,364,596	5.5
Agricultural sciences	3,625,448	3,548,896	-2.1
Biological and biomedical sciences	15,764,528	16,557,201	5.0
Health sciences	28,001,450	29,884,728	6.7
Natural resources and conservation	901,667	934,765	3.7
Life sciences nec	1,329,244	1,439,006	8.3
Mathematics and statistics	800,322	772,935	-3.4
Physical sciences	5,671,806	5,740,630	1.2
Astronomy and astrophysics	780,356	741,127	-5.0
Chemistry	1,929,674	1,999,546	3.6
Materials science	252,521	285,931	13.2
Physics	2,434,432	2,463,331	1.2
Physical sciences nec	274,823	250,695	-8.8
Psychology	1,360,904	1,326,030	-2.6
Social sciences	2,953,545	2,842,033	-3.8
Anthropology	119,869	109,546	-8.6
Economics	558,825	549,132	-1.7
Political science and government	425,776	425,661	0.0
Sociology, demography, and population studies	594,688	552,551	-7.1
Social sciences nec	1,254,387	1,205,143	-3.9
Sciences nec	953,370	1,022,500	7.3
Engineering	13,707,821	14,293,487	4.3
Aerospace, aeronautical, and astronautical engineering	1,293,452	1,451,964	12.3
Bioengineering and biomedical engineering	1,470,038	1,560,381	6.1
Chemical engineering	1,001,458	1,024,301	2.3
Civil engineering	1,424,780	1,482,377	4.0
Electrical, electronic, and communications engineering	3,051,845	3,080,363	0.9
Industrial and manufacturing engineering	586,908	573,915	-2.2
Mechanical engineering	1,817,413	1,881,551	3.5
Metallurgical and materials engineering	818,665	841,196	2.8
Engineering nec	2,243,262	2,397,439	6.9
Non-S&E	5,023,112	5,113,430	1.8
Business management and business administration	880,567	934,020	6.1
Communication and communications technologies	190,252	186,003	-2.2
Education	1,602,246	1,616,705	0.9
Humanities	563,400	556,694	-1.2
Law	267,655	282,662	5.6
Social work	307,106	319,273	4.0
Visual and performing arts	173,191	179,563	3.7
Non-S&E nec	1,038,695	1,038,510	0.0

nec = not elsewhere classified; S&amp;E = science and engineering.

**Note(s):**

This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2020. Institutions reporting less than \$1 million in total R&D expenditures in FY 2020 completed a shorter version of the survey form in FY 2021, and that form did not collect R&D expenditures by detailed field. Total expenditures from institutions reporting less than \$1 million in R&D in FY 2021 was \$149 million.

**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.