

Table 3**Higher education R&D expenditures, by R&D field: FYs 2019–20**

(Thousands of current dollars)

Field	2019	2020	% change 2019–20
All R&D fields	83,534,148	86,296,178	3.3
Science	65,452,989	67,567,807	3.2
Computer and information sciences	2,639,075	2,923,149	10.8
Geosciences, atmospheric sciences, and ocean sciences	3,185,923	3,281,251	3.0
Atmospheric science and meteorology	590,385	612,890	3.8
Geological and earth sciences	1,121,265	1,159,627	3.4
Ocean sciences and marine sciences	1,100,768	1,136,259	3.2
Geosciences, atmospheric sciences, and ocean sciences nec	373,505	372,475	-0.3
Life sciences	48,256,664	49,640,508	2.9
Agricultural sciences	3,426,773	3,626,162	5.8
Biological and biomedical sciences	15,392,567	15,761,876	2.4
Health sciences	27,293,004	28,026,662	2.7
Natural resources and conservation	841,877	900,697	7.0
Life sciences nec	1,302,443	1,325,111	1.7
Mathematics and statistics	769,993	798,975	3.8
Physical sciences	5,551,490	5,667,046	2.1
Astronomy and astrophysics	735,006	780,080	6.1
Chemistry	1,965,712	1,926,772	-2.0
Materials science	259,316	252,193	-2.7
Physics	2,327,359	2,434,467	4.6
Physical sciences nec	264,097	273,534	3.6
Psychology	1,326,304	1,357,081	2.3
Social sciences	2,808,228	2,947,338	5.0
Anthropology	124,402	119,329	-4.1
Economics	459,822	562,192	22.3
Political science and government	448,438	425,267	-5.2
Sociology, demography, and population studies	610,435	591,754	-3.1
Social sciences nec	1,165,131	1,248,796	7.2
Sciences nec	915,312	952,459	4.1
Engineering	13,216,209	13,692,756	3.6
Aerospace, aeronautical, and astronautical engineering	1,170,169	1,295,759	10.7
Bioengineering and biomedical engineering	1,451,159	1,468,229	1.2
Chemical engineering	977,578	999,312	2.2
Civil engineering	1,433,224	1,422,418	-0.8
Electrical, electronic, and communications engineering	2,938,343	3,048,420	3.7
Industrial and manufacturing engineering	556,462	588,127	5.7
Mechanical engineering	1,705,716	1,812,916	6.3
Metallurgical and materials engineering	792,370	816,610	3.1
Engineering nec	2,191,188	2,240,965	2.3
Non-S&E	4,864,950	5,035,615	3.5
Business management and business administration	871,253	878,721	0.9
Communication and communications technologies	206,913	191,813	-7.3
Education	1,526,519	1,603,978	5.1
Humanities	539,984	563,007	4.3
Law	255,797	267,565	4.6
Social work	285,850	307,145	7.4
Visual and performing arts	159,482	171,605	7.6
Non-S&E nec	1,019,152	1,051,781	3.2

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

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2019. Institutions reporting less than \$1 million in total R&D expenditures in FY 2019 completed a shorter version of the survey form in FY 2020 that did not include this question. Total expenditures from institutions reporting less than \$1 million in R&D in FY 2020 was \$138,876 thousand.

Source(s):

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