

Table 3**Higher education R&D expenditures, by R&D field: FYs 2018–19**

(Thousands of current dollars)

Field	2018	2019	% change 2018–19
All R&D fields	79,014,076	83,496,348	5.7
Science	62,010,922	65,418,917	5.5
Computer and information sciences	2,399,150	2,639,334	10.0
Geosciences, atmospheric sciences, and ocean sciences	3,160,061	3,185,089	0.8
Atmospheric science and meteorology	608,069	590,387	-2.9
Geological and earth sciences	1,131,945	1,120,621	-1.0
Ocean sciences and marine sciences	1,061,406	1,100,653	3.7
Geosciences, atmospheric sciences, and ocean sciences, nec	358,641	373,428	4.1
Life sciences	45,603,136	48,230,138	5.8
Agricultural sciences	3,311,482	3,428,585	3.5
Biological and biomedical sciences	14,512,898	15,386,607	6.0
Health sciences	25,773,804	27,274,318	5.8
Natural resources and conservation	776,070	837,959	8.0
Life sciences, nec	1,228,882	1,302,669	6.0
Mathematics and statistics	750,544	769,722	2.6
Physical sciences	5,229,222	5,551,281	6.2
Astronomy and astrophysics	668,257	735,031	10.0
Chemistry	1,866,450	1,965,627	5.3
Materials science	254,587	259,327	1.9
Physics	2,203,113	2,324,419	5.5
Physical sciences, nec	236,815	266,877	12.7
Psychology	1,255,766	1,322,793	5.3
Social sciences	2,723,373	2,805,477	3.0
Anthropology	118,348	124,225	5.0
Economics	456,536	459,140	0.6
Political science and government	438,284	448,174	2.3
Sociology, demography, and population studies	608,615	610,107	0.2
Social sciences, nec	1,101,590	1,163,831	5.7
Sciences, nec	889,670	915,083	2.9
Engineering	12,366,530	13,214,359	6.9
Aerospace, aeronautical, and astronautical engineering	1,010,498	1,169,928	15.8
Bioengineering and biomedical engineering	1,343,010	1,450,156	8.0
Chemical engineering	932,787	977,867	4.8
Civil engineering	1,355,553	1,432,381	5.7
Electrical, electronic, and communications engineering	2,843,764	2,938,953	3.3
Industrial and manufacturing engineering	515,103	557,350	8.2
Mechanical engineering	1,631,356	1,705,397	4.5
Metallurgical and materials engineering	762,996	791,260	3.7
Engineering, nec	1,971,463	2,191,067	11.1
Non-S&E	4,636,624	4,863,072	4.9
Business management and business administration	784,662	873,015	11.3
Communication and communications technologies	192,310	209,159	8.8
Education	1,496,716	1,520,025	1.6
Humanities	504,656	540,935	7.2
Law	267,031	255,618	-4.3
Social work	245,139	285,714	16.6
Visual and performing arts	137,234	159,452	16.2
Non-S&E, nec	1,008,876	1,019,154	1.0

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 2018. Institutions reporting less than \$1 million in total R&D expenditures in FY 2018 completed a shorter version of the survey form in FY 2019 that did not include this question.

Source(s):

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