

Table 11. Federally financed higher education R&D expenditures at institutions in the standard form survey population, by federal agency and R&D field: FY 2024

(Dollars in thousands)

Field	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
All R&D fields	64,639,941	10,173,898	2,941,393	35,500,073	2,368,711	7,173,758	1,976,398	4,505,710
Science	50,524,105	4,608,662	1,625,392	33,512,191	1,614,292	4,864,495	1,793,380	2,505,693
Computer and information sciences	2,597,399	1,150,806	77,052	213,852	26,113	910,280	21,798	197,498
Geosciences, atmospheric sciences, and ocean sciences	2,904,063	338,398	171,792	60,481	531,232	957,209	44,860	800,091
Atmospheric science and meteorology	587,101	77,161	29,338	2,432	160,634	120,525	3,120	193,891
Geological and earth sciences	1,028,127	82,341	108,576	9,537	247,762	361,408	26,286	192,217
Ocean sciences and marine sciences	954,889	165,931	15,389	13,794	63,111	396,182	5,661	294,821
Geosciences, atmospheric sciences, and ocean sciences nec	333,946	12,965	18,489	34,718	59,725	79,094	9,793	119,162
Life sciences	36,573,922	1,850,594	243,160	30,915,196	92,409	979,095	1,614,291	879,177
Agricultural sciences	1,707,617	25,641	51,849	219,061	11,297	103,034	1,114,217	182,518
Biological and biomedical sciences	12,589,402	505,930	141,044	10,809,895	29,609	690,396	225,280	187,248
Health sciences	20,969,007	1,272,481	25,667	19,182,570	32,512	88,109	58,474	309,194
Natural resources and conservation	503,439	30,602	22,645	28,204	15,198	69,551	170,504	166,735
Life sciences nec	804,457	15,940	1,955	675,466	3,793	28,005	45,816	33,482
Mathematics and statistics	727,271	201,515	14,231	78,410	129,821	266,131	7,346	29,817
Physical sciences	4,899,902	809,857	1,063,722	776,260	795,394	1,325,390	12,871	116,408
Astronomy and astrophysics	722,929	27,867	25,728	1,167	524,245	139,837	312	3,773
Chemistry	1,524,637	155,602	225,297	658,465	14,340	435,100	7,041	28,792
Materials science	229,274	88,464	44,276	12,654	4,180	68,025	1,626	10,049
Physics	2,207,764	495,704	725,954	83,105	236,357	610,885	2,386	53,373
Physical sciences nec	215,298	42,220	42,467	20,869	16,272	71,543	1,506	20,421
Psychology	1,027,212	62,649	534	763,546	16,928	92,295	4,813	86,447
Social sciences	1,295,442	95,288	20,565	560,676	12,559	207,460	75,674	323,220
Anthropology	56,158	3,134	1,382	7,812	43	27,951	3,579	12,257
Economics	212,947	6,058	7,500	75,874	742	25,434	53,209	44,130
Political science and government	124,004	17,136	2,749	22,215	758	36,219	913	44,014
Sociology, demography, and population studies	337,323	19,329	250	202,746	696	42,092	4,878	67,332
Social sciences nec	565,010	49,631	8,684	252,029	10,320	75,764	13,095	155,487
Sciences nec	498,894	99,555	34,336	143,770	9,836	126,635	11,727	73,035
Engineering	12,185,245	5,450,483	1,296,363	1,513,708	741,938	1,876,153	132,873	1,173,727
Aerospace, aeronautical, and astronautical engineering	1,579,997	1,063,630	28,543	9,377	277,107	45,193	1,747	154,400
Bioengineering and biomedical engineering	1,324,949	186,584	18,584	921,281	13,358	128,072	28,287	28,783
Chemical engineering	828,980	150,462	211,805	149,709	13,902	210,542	11,035	81,525
Civil engineering	1,023,417	155,840	167,195	47,135	22,534	221,706	21,308	387,699
Electrical, electronic, and communications engineering	3,231,304	1,939,425	196,736	144,045	191,514	572,381	9,760	177,443
Industrial and manufacturing engineering	524,338	320,659	25,556	15,547	25,276	69,129	1,683	66,488
Mechanical engineering	1,753,617	874,229	213,260	116,822	132,137	290,355	10,984	115,830
Metallurgical and materials engineering	747,553	362,963	157,821	42,225	13,672	138,629	1,607	30,636
Engineering nec	1,171,090	396,691	276,863	67,567	52,438	200,146	46,462	130,923
Non-S&E	1,930,591	114,753	19,638	474,174	12,481	433,110	50,145	826,290

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Field	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Business management and business administration	120,973	13,383	1,747	13,016	73	22,644	5,638	64,472
Communication and communications technologies	65,394	6,997	4,962	19,718	623	20,397	1,231	11,466
Education	974,858	23,536	1,723	115,618	5,856	284,016	15,457	528,652
Humanities	69,567	7,949	687	13,858	102	14,308	655	32,008
Law	43,441	456	372	8,101	10	2,520	695	31,287
Social work	224,358	831	50	192,560	0	1,968	1,546	27,403
Visual and performing arts	25,590	620	297	4,665	3,731	5,828	303	10,146
Non-S&E nec	406,410	60,981	9,800	106,638	2,086	81,429	24,620	120,856

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; nec = not elsewhere classified; S&E = science and engineering; USDA = Department of Agriculture.

^a Other agency R&D expenditures includes all other agencies reported.

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2023. Institutions reporting less than \$1 million in total R&D expenditures in 2023 completed a shorter version of the survey form in FY 2024, and that form did not collect federally financed R&D expenditures by source and detailed field.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2024.