

Table 10. Higher education R&D expenditures at institutions in the standard form survey population, by source of funds and R&D field: FY 2024

(Dollars in thousands)

Field	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All R&D fields	117,554,145	64,639,941	6,076,128	30,150,641	6,355,526	6,685,726	3,646,183
Science	90,713,503	50,524,105	4,485,045	22,473,767	4,905,046	5,494,978	2,830,562
Computer and information sciences	3,955,529	2,597,399	95,728	856,540	188,447	109,627	107,788
Geosciences, atmospheric sciences, and ocean sciences	4,407,449	2,904,063	296,961	841,775	97,986	170,127	96,537
Atmospheric science and meteorology	737,245	587,101	25,816	93,630	8,352	12,092	10,254
Geological and earth sciences	1,688,053	1,028,127	95,849	400,346	53,024	61,991	48,716
Ocean sciences and marine sciences	1,497,079	954,889	145,297	266,750	24,592	75,192	30,359
Geosciences, atmospheric sciences, and ocean sciences nec	485,072	333,946	29,999	81,049	12,018	20,852	7,208
Life sciences	66,821,053	36,573,922	3,495,391	16,149,107	4,276,657	4,129,461	2,196,515
Agricultural sciences	4,802,906	1,707,617	1,144,347	1,474,436	159,419	160,180	156,907
Biological and biomedical sciences	20,769,747	12,589,402	638,516	4,816,901	893,229	1,320,926	510,773
Health sciences	38,512,622	20,969,007	1,420,731	9,040,610	3,144,915	2,507,892	1,429,467
Natural resources and conservation	1,127,157	503,439	190,095	323,933	18,221	54,174	37,295
Life sciences nec	1,608,621	804,457	101,702	493,227	60,873	86,289	62,073
Mathematics and statistics	1,164,507	727,271	34,484	326,061	12,158	55,464	9,069
Physical sciences	7,456,024	4,899,902	152,543	1,712,534	228,724	292,659	169,662
Astronomy and astrophysics	1,078,915	722,929	10,629	200,577	3,064	58,776	82,940
Chemistry	2,517,853	1,524,637	66,649	673,292	95,546	113,527	44,202
Materials science	348,922	229,274	4,791	87,281	17,436	5,524	4,616
Physics	3,107,027	2,207,764	48,088	654,300	67,592	100,054	29,229
Physical sciences nec	403,307	215,298	22,386	97,084	45,086	14,778	8,675
Psychology	1,730,944	1,027,212	69,233	490,126	11,002	107,773	25,598
Social sciences	3,909,953	1,295,442	257,147	1,543,739	54,594	579,175	179,856
Anthropology	178,236	56,158	4,871	96,505	1,382	12,047	7,273
Economics	780,462	212,947	66,699	297,778	13,970	146,376	42,692
Political science and government	601,465	124,004	24,480	285,737	4,537	118,959	43,748
Sociology, demography, and population studies	768,731	337,323	45,701	254,400	15,911	99,228	16,168
Social sciences nec	1,581,059	565,010	115,396	609,319	18,794	202,565	69,975
Sciences nec	1,268,044	498,894	83,558	553,885	35,478	50,692	45,537
Engineering	19,271,406	12,185,245	1,039,887	3,764,180	1,265,499	500,452	516,143
Aerospace, aeronautical, and astronautical engineering	2,054,095	1,579,997	51,161	188,183	205,821	5,645	23,288
Bioengineering and biomedical engineering	2,081,887	1,324,949	74,307	438,403	70,653	139,463	34,112
Chemical engineering	1,409,387	828,980	55,375	317,058	115,617	58,252	34,105
Civil engineering	2,096,724	1,023,417	363,030	522,627	84,541	57,270	45,839
Electrical, electronic, and communications engineering	4,415,693	3,231,304	100,214	689,243	186,353	99,524	109,055
Industrial and manufacturing engineering	747,870	524,338	42,035	133,102	28,710	10,780	8,905
Mechanical engineering	2,572,680	1,753,617	91,594	456,229	188,296	37,507	45,437

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Metallurgical and materials engineering	1,141,081	747,553	41,759	204,815	81,818	28,039	37,097
Engineering nec	2,751,989	1,171,090	220,412	814,520	303,690	63,972	178,305
Non-S&E	7,569,236	1,930,591	551,196	3,912,694	184,981	690,296	299,478
Business management and business administration	1,349,055	120,973	61,992	986,209	40,431	54,203	85,247
Communication and communications technologies	263,204	65,394	13,483	132,552	6,333	34,198	11,244
Education	2,218,025	974,858	222,483	669,018	56,912	254,768	39,986
Humanities	926,242	69,567	24,143	654,357	19,817	117,060	41,298
Law	443,674	43,441	42,413	247,342	6,033	72,478	31,967
Social work	461,284	224,358	58,707	128,868	5,444	38,308	5,599
Visual and performing arts	302,978	25,590	16,036	233,554	2,855	15,876	9,067
Non-S&E nec	1,604,774	406,410	111,939	860,794	47,156	103,405	75,070

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 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 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.