TABLE A-18

Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2023

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
All R&D fields	3,259,897	17,843	0.5	1,573,117	10,229	0.7
All science and engineering	3,188,161	131,353	4.1	1,554,212	52,875	3.4
Computer and information sciences	133,914	12,773	9.5	73,273	3,515	4.8
Geosciences, atmospheric sciences, and ocean sciences	149,477	4,090	2.7	93,196	772	0.8
Atmospheric science and meteorology	23,967	732	3.1	18,240	121	0.7
Geological and earth sciences	57,147	1,632	2.9	28,915	307	1.1
Ocean sciences and marine sciences	60,956	1,714	2.8	42,381	341	0.8
Geosciences, atmospheric sciences, and ocean sciences nec	7,407	12	0.2	3,660	3	0.1
Life sciences	1,331,012	31,168	2.3	538,741	17,630	3.3
Agricultural sciences	157,445	626	0.4	52,081	415	0.8
Biological and biomedical sciences	566,598	14,624	2.6	261,976	9,373	3.6
Health sciences	541,976	12,363	2.3	199,709	6,244	3.1
Natural resources and conservation	19,270	204	1.1	7,153	170	2.4
Life sciences nec	45,723	3,351	7.3	17,822	1,428	8.0
Mathematics and statistics	13,546	7,937	58.6	6,646	2,510	37.8
Physical sciences	526,210	15,346	2.9	288,280	6,234	2.2
Astronomy and astrophysics	50,196	2,129	4.2	24,463	1,147	4.7
Chemistry	179,214	2,159	1.2	82,629	1,443	1.7
Materials science	19,923	33	0.2	9,231	33	0.4
Physics	223,252	9,142	4.1	149,604	3,354	2.2
Physical sciences nec	53,625	1,883	3.5	22,353	257	1.1
Psychology	16,859	385	2.3	9,106	278	3.1
Social sciences	21,316	1,097	5.1	5,269	564	10.7
Anthropology	2,183	11	0.5	666	1	0.2
Economics	4,171	314	7.5	1,512	133	8.8
Political science and government	1,455	43	3.0	583	10	1.7
Sociology, demography, and population studies	3,168	323	10.2	346	106	30.6
Social sciences nec	10,339	406	3.9	2,162	314	14.5
Sciences nec	49,040	1,968	4.0	13,653	597	4.4
Engineering	946,787	56,589	6.0	526,048	20,775	3.9
Aerospace, aeronautical, and astronautical engineering	129,830	7,214	5.6	81,026	2,113	2.6
Bioengineering and biomedical engineering	96,590	2,831	2.9	44,056	1,711	3.9
Chemical engineering	81,273	782	1.0	46,266	299	0.6
Civil engineering	55,115	507	0.9	24,507	213	0.9
Electrical, electronic, and communications engineering	205,886	24,972	12.1	131,082	9,206	7.0
Industrial and manufacturing engineering	31,933	4,315	13.5	18,130	1,267	7.0
Mechanical engineering	129,395	10,624	8.2	70,832	4,084	5.8
Metallurgical and materials engineering	71,977	1,489	2.1	48,955	732	1.5
Engineering nec	144,788	3,855	2.7	61,194	1,150	1.9
All non-science and engineering	71,736	1,006	1.4	18,905	421	2.2

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Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2023

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
Business management and business administration	4,629	127	2.7	317	11	3.5
Communication and communications technologies	3,448	51	1.5	541	3	0.6
Education	6,954	562	8.1	2,270	359	15.8
Humanities	4,568	171	3.7	241	24	10.0
Law	743	17	2.3	121	2	1.7
Social work	293	12	4.1	167	8	4.8
Visual and performing arts	4,688	38	0.8	838	4	0.5
Non-science and engineering nec	46,413	28	0.1	14,410	10	0.1

nec = not elsewhere classified.

Note(s):
Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting $1 million or more in total R&D expenditures in FY 2022. Institutions reporting less than $1 million in total R&D expenditures in FY 2022 completed a shorter version of the survey form in FY 2023 that did not include this question.

Source(s):
National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2023.