

TABLE A-18

**Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2022**

(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	2,700,652	9,844	0.4	1,336,692	6,231	0.5
All science and engineering	2,646,967	101,573	3.8	1,326,448	33,595	2.5
Computer and information sciences	136,868	10,917	8.0	78,813	2,246	2.8
Geosciences, atmospheric sciences, and ocean sciences	136,651	5,001	3.7	85,617	1,174	1.4
Atmospheric science and meteorology	23,944	705	2.9	18,413	108	0.6
Geological and earth sciences	47,613	1,929	4.1	22,360	351	1.6
Ocean sciences and marine sciences	52,689	1,788	3.4	36,435	329	0.9
Geosciences, atmospheric sciences, and ocean sciences nec	12,405	579	4.7	8,409	386	4.6
Life sciences	1,056,808	19,185	1.8	429,317	11,346	2.6
Agricultural sciences	120,530	475	0.4	33,636	318	0.9
Biological and biomedical sciences	485,746	10,508	2.2	231,374	6,261	2.7
Health sciences	408,455	7,950	1.9	149,025	4,646	3.1
Natural resources and conservation	13,797	235	1.7	5,278	116	2.2
Life sciences nec	28,280	17	0.1	10,004	5	0.0
Mathematics and statistics	10,648	4,212	39.6	5,277	1,189	22.5
Physical sciences	408,769	14,028	3.4	262,166	4,307	1.6
Astronomy and astrophysics	27,500	1,564	5.7	17,656	623	3.5
Chemistry	139,819	3,039	2.2	78,071	1,456	1.9
Materials science	22,064	24	0.1	16,928	24	0.1
Physics	198,354	7,804	3.9	136,324	2,032	1.5
Physical sciences nec	21,032	1,597	7.6	13,187	172	1.3
Psychology	14,616	333	2.3	6,886	218	3.2
Social sciences	21,001	1,082	5.2	6,247	582	9.3
Anthropology	2,944	17	0.6	308	7	2.3
Economics	2,346	441	18.8	1,191	214	18.0
Political science and government	1,640	90	5.5	740	38	5.1
Sociology, demography, and population studies	1,882	216	11.5	263	65	24.7
Social sciences nec	12,189	318	2.6	3,745	258	6.9
Sciences nec	58,822	1,692	2.9	12,089	423	3.5
Engineering	802,784	45,123	5.6	440,036	12,110	2.8
Aerospace, aeronautical, and astronautical engineering	72,887	5,805	8.0	48,599	1,293	2.7
Bioengineering and biomedical engineering	67,216	1,940	2.9	33,218	1,098	3.3
Chemical engineering	62,492	735	1.2	33,584	273	0.8
Civil engineering	48,545	346	0.7	24,667	99	0.4
Electrical, electronic, and communications engineering	181,826	19,790	10.9	124,371	4,657	3.7
Industrial and manufacturing engineering	26,538	3,562	13.4	16,102	796	4.9
Mechanical engineering	100,619	9,125	9.1	62,624	3,014	4.8
Metallurgical and materials engineering	66,604	859	1.3	43,734	198	0.5
Engineering nec	176,057	2,961	1.7	53,137	682	1.3
All non-science and engineering	53,685	834	1.6	10,244	200	2.0

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	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	8,885	151	1.7	916	29	3.2
Communication and communications technologies	4,102	13	0.3	900	8	0.9
Education	4,331	226	5.2	1,294	86	6.6
Humanities	3,092	260	8.4	237	50	21.1
Law	779	55	7.1	110	2	1.8
Social work	530	46	8.7	160	13	8.1
Visual and performing arts	2,563	46	1.8	99	3	3.0
Non-science and engineering nec	29,403	37	0.1	6,528	9	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 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.